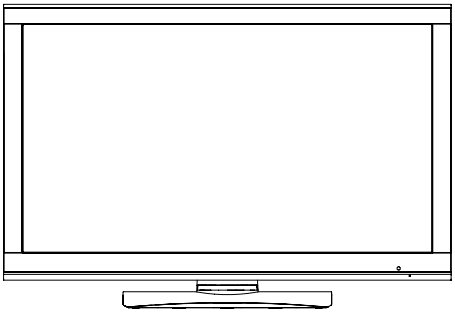
# SuperScan

## SERVICE MANUAL

YK | No.011E

SSH2442



### Caution

Be sure to read this manual before servicing. To assure safety from fire, electric shock, injury, harmful radiation and materials, various measures have been provided for in this HITACHI Plasma display service manual.
Be sure to read all cautionary items described in the manual to maintain safety before servicing.

### Service Warning

1. Since the Panel Module and front Filter are made of glass, handle a broken Module and/or Filter with sufficient care, in order not to be injured.
2. Repair work should not be started until after the Panel Module and the AC/DC Power supply have cooled sufficiently.
3. Special care should be exercised in the proximity of the display area in order not to damage its surface.
4. The Panel Module should not be touched with bare hands, as this will protect its surface from stains.
5. It is recommended to use clean soft gloves during the repair work in order to protect not only the display area of the Panel Module but also the technician.
6. The Chip Tube of the Panel Module (located in the upper left corner of the back of the glass panel) is very fragile; as well, the flat cables connecting the Panel to the drive circuit PWBs are very weak. Take care not to damage these, otherwise, the panel will never light again.

### Contents


1. Features ---------- 3
2. Specifications ---------- 4
3. Component Names ---------- 5
4. Service point ---------- 6
5. Service Modes ---------- 7
6. Troubleshooting ---------- 16
7. Block Diagram ---------- 19
8. Connector Diagram ..... 22
9. Wiring Diagram ..... 23
10. Basic Circuit Diagram ..... 25
11. Printed Wiring Board Diagram ..... 30
12. Disassembly Diagram ..... 38
13. Replacement Parts List ..... 45
14. Board Layout .....47 updated 07/12/05


**SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT.**

# Plasma Display


**August 2004** Digital Media Division
Version 011E.01

# CAUTION FOR SAFETY

Please read this page before making repairs to the monitor.
This page explains certain safety items found in this manual which are intended to ensure the safety of the technician and to prevent accidents during any repair work.

| | |
|---|---|
| ⚠ **Warning** | This symbol means **"Personnel Electrical Safety Hazard"** |
| ⚠ **Caution** | This symbol means **"Equipment Operational Hazard"** |

| | |
|---|---|
| ⚠ | This symbol means **"CAUTION"** |
| ⚠ | This symbol means **"POSSIBILITY OF ELECTRIC SHOCK"** |

| | |
|---|---|
| ❗ | This symbol means **"DO IT!"** |
| ⃠ | This symbol means **"DON'T DO IT!"** |

## ⚠ WARNING

■ **Special Instructions**

⚠

This indicates cabinet, chassis or parts which require special attention.
Please follow any notes as well as all safety precautions.

■ **Prevent electrical shock**

⚠

Please use care and caution when servicing this product. High voltages exist in the set which can cause injury or death.

Please disconnect the AC power during repair to prevent serious shock or death.

■ **Use only recommended components.**

❗

Please use the same characteristic components, which is same as previous for your safety. To ensure reliability, specially marked parts (⚠) should be OEM when replaced. These parts are also safety related, so electrical shock and/or fire could result from using generic parts.

■ **Keep the same wiring dress for boards.**

❗

This monitor uses insulated spacers which are intended to isolate metal parts from electrical components.

Internal wiring is isolated from components by using clamps, retainers, etc., so please return to original condition for prevention of electrical shock or fire.

■ **Safety check should be done after finished.**

❗

Every part (removed screws, component and wiring) should be returned to previous condition.
Check around the repaired area for any damage by mistake. Measure the insulated impedance of AC by ohm meter. Confirm that the value of impedance is greater than 4M ohm.
It is possible for electric shock or fire to occur if the value is less than 4M ohm.

■ **Repair to the HDCP circuit is limited.**

⃠

Never remove the shield case, which is assembled to code with the HDCP circuit

## PRECAUTIONS

**How to clean the plasma panel front glass of the monitor**

Before cleaning the monitor, turn off the monitor and disconnect the power plug from the power outlet.
To prevent scratching or damaging the plasma screen face, do not wipe the surface with sharp or hard objects. Clean the screen with a soft cloth moistened with warm water and dry with a soft cloth. If it is not clean enough, then use a cloth with glass cleaner. Do not use any harsh or abrasive chemicals.

**How to clean the cabinet of the monitor**

Use a soft cloth to clean the cabinet and control panel of the monitor. When excessively soiled dilute a neutral detergent in water, wet and wring out the soft cloth and afterward wipe with a dry soft cloth.
Never use acid/alkaline detergent, alcoholic detergent, abrasive cleaner, powder soap, OA cleaner, car wax, etc. because they could cause discoloration, scratches or cracks.

# *1. Features*

**Enhanced definition Plasma display panel**

The 42-inch color plasma display panel, with a resolution of 852 (H) x 480(V) pixels, creates a widescreen picture. This panel features a thin form factor and can be hung on a wall with the optional wall mount kit.

**High Performance Digital Processor**

A wide range of personal computer signals can be handled, from 640 x 400, 640 x 480 VGA to 1600 x 1200 UXGA. (RGB analog input)

**Easy-to-use remote control and on-screen-display system (OSD)**

The included remote control operates all TV functions. Furthermore, the on-screen-display (OSD), displays the status of control settings in an easy-to-view fashion.

**Power saving system**

The International ENERGY STAR power saver feature saves power consumption automatically when input signals are not available.
When connected to a VESA DPMS-compliant PC, the monitor cuts its power consumption while it is idle.

# 2. Specifications

| | | |
|---|---|---|
| Panel | Display dimensions | Approx. 42 inches (920 (H) x 518 (V) mm, diagonal 1059mm) |
| | Resolution | 852 (H) x 480 (V) pixels |
| Net dimensions | | 1030 (W) x 636 (H) x 91 (D) mm (excluding Speakers / Stand)<br>1232 (W) x 711.5 (H) x 300 (D) mm (including Speakers / Stand) |
| Net weight | | 33.0 kg (excluding Speakers / Stand)<br>42.0 kg (including Speakers / Stand) |
| Ambient conditions | Temperature | Operating: 5°C to 35°C, Storage: -15°C to 60°C |
| | Relative humidity | Operating: 20% to 80%, Storage: 20% to 90% (non-condensing) |
| Power supply | | AC100 - 240V, 50/60Hz |
| Power consumption/at standby | | 310W / <3W |
| Audio output | | 10W + 10W (6Ω) |
| (RGB input) | | |
| Input signals | Input terminals | RGB1-VGA audio input terminal (3.5mm Stereo Mini Jack)<br>RGB1-VGA analog RGB input terminal (D-sub 15-pin)<br>RGB2 DVI-D input terminal (DVI-D)<br>RGB2 DVI-D audio input terminal (3.5mm Stereo Mini Jack) |
| | Video signals | 0.7 V |
| | Sync signals | H/V separate, TTL level [2kΩ]<br>H/V composite, TTL level [2kΩ]<br>Sync on green, 0.3 Vp-p [75Ω] |
| Recommended signal | | 43 modes |
| (Video input) | | |
| Input signals | Input terminals | AV1 : Composite video input terminal(RCA)<br>AV1 : S video input teminal<br>AV1 : L/R audio input terminal(RCA)<br>AV2 : Composite video input terminal(RCA)<br>AV2 : S video input teminal<br>AV2 : L/R audio input terminal(RCA)<br>AV3 : Component input (Y-CbCr) (RCA)<br>AV3 : L/R audio input terminal(RCA)<br>AV4 : Component input (Y-CbCr or Y-PbPr) (RCA)<br>AV4 : L/R audio input terminal(RCA) |
| | Video signals | AV1 : NTSC-M<br>AV2 : NTSC-M<br>AV3 : 480i<br>AV4 : 480i , 480p , 1080i/60 , 720p/60 |
| Video output Signal | | OUTPUT (MONITOR): composite video monitor-output terminal (RCA)<br>OUTPUT (MONITOR): L/R audio monitor- output terminal (RCA) |
| Recommended signal | | 5 modes |
| (RF input) | | |
| Input signals | Input terminals | ANT: 75Ω Unbalanced |
| | RF Video System | NTSC-M |

• It takes at least 30 minutes to attain the maximum picture quality.

## Applicable video signals for each input terminal

| Terminal | RCA | | | DVI | D-sub * | Remarks |
|---|---|---|---|---|---|---|
| Type | Composite | S-video | Component | PC/STB | RGB | |
| AV1 | O | O | | | | |
| AV2 | O | O | | | | |
| AV3 | | | O | | | 480i Video Signal only |
| AV4 | | | O | | | 1080i/720P/480P/480i inputs. |
| RGB1 | | | | | O | |
| RGB2 | | | | O | | |

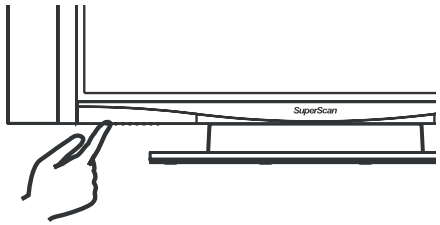
(O: Available)

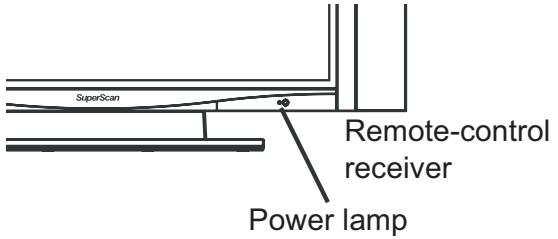
# 3. Component names

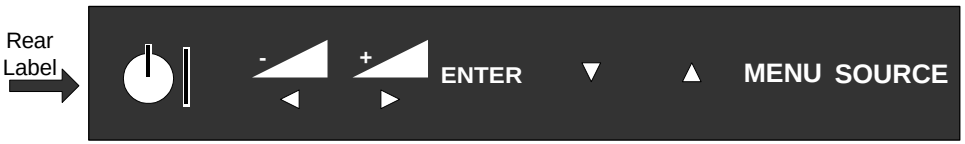
## [Main unit]

### Control panel

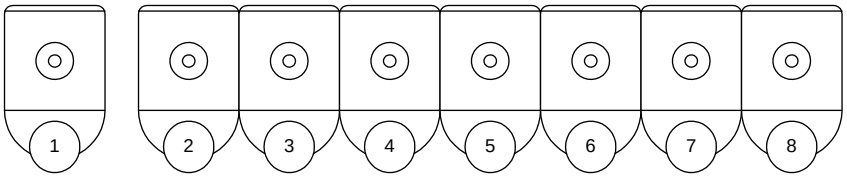
- Adjustment buttons are located on the bottom.
- The back cover is provided with indications to distinguish the adjustment buttons.



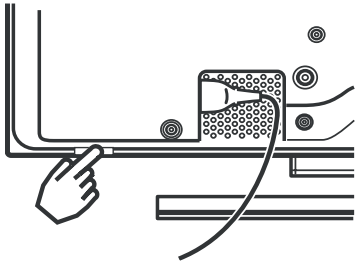




Main power switch




The main power switch is located at the back, on the lower surface.

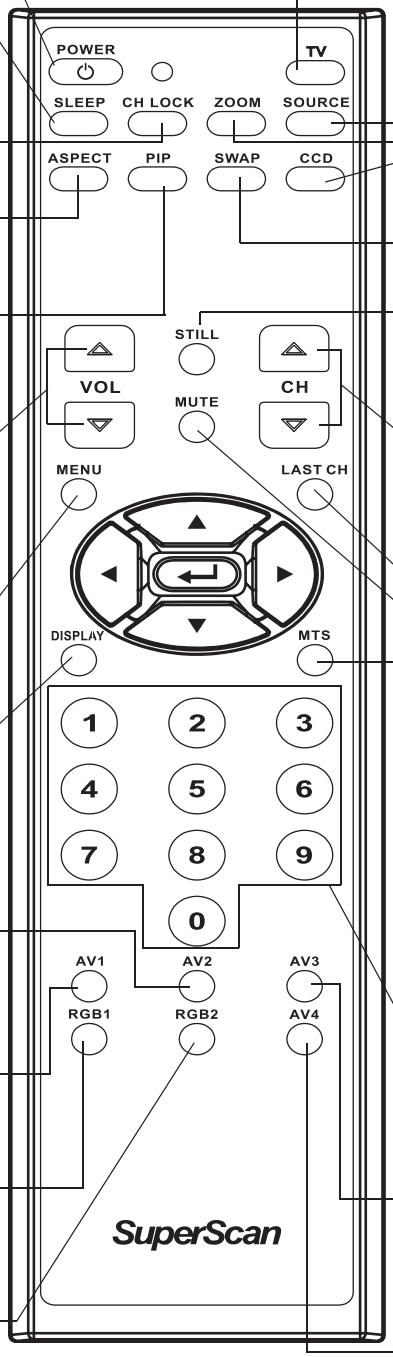


1. SUB-POWER
2. VOL ▼
2. SELECT <
3. VOL ▲
3. SELECT >
4. ENTER
5. PROGRAM ▼
5. SELECT ▼
6. PROGRAM ▲
6. SELECT ▲
7. MENU
8. SOURCE

**Normal Button Action**

**Button Action when MENU engaged**

# Remote




**POWER**
Press this button to turn the TV on or off.

**SLEEP**
Press this button to activate the Sleep Timer menu.

**CH-LOCK**
Press this button to select the V-chip function.

**ASPECT**
Press this button to selcet how the picture is displayed on the screen; 4:3,16:9, Panoramic, or Cinema modes.

**PIP**
Press this button to show the PIP and change the size of PIP.

**VOL**
Press these two buttons to adjust the volume up or down.

**MENU**
Press this button to select the On Screen Display Menu.

**DISPLAY**
Press this button to show the input signal information.

**AV2**
Press this button to select the VIDEO 2 or S-VIDEO 2 INPUT.

**AV1**
Press this button to select the VIDEO 1 or S-VIDEO 1 INPUT.

**RGB1**
Press this button to select the RGB1 VGA INPUT.

**RGB2**
Press this button to select the RGB2 DVI-D INPUT.

**TV**
Press this button to choose TV as the source.

**Source**
Press this button to select the INPUT Source.

**ZOOM**
Press this button to change the picture size.

**CCD**
Press this button to show the Close Caption menu.

**SWAP**
Press this button to exchange main picture with PIP picture.

**STILL**
Press this button to freeze the picture. Press it again to return to normal operation.

**CH**
Press these two buttons to select the channel up or down.

**LAST CH**
Press this button to return to the last Channel viewed.

**MUTE**
Press this button to turn off the sound. Press it once more or press the volume up button to return the sound.

**MTS**
Press this button to select Multi-channel television sound. This button operates only in the TV mode.

**NUMBERS KEYPAD**
Press these buttons to access the corresponding TV channels.

**AV3**
Press this button to select the AV3 480i INPUT.

**AV4**
Press this button to select the AV4 480p/480i INPUT.

# *4. Service points*

## ● Lead free solder

This product uses lead free solder (unleaded) to help preserve the environment. Please read these instructions before attempting any soldering work.

**Caution:** Always wear safety glasses to prevent fumes or molten solder from getting into the eyes. Lead free solder can splatter at high temperatures (600˚C).

### ■ Lead free solder indicator

Printed circuit boards using lead free solder are engraved with an "F."

### ■ Properties of lead free solder

The melting point of lead free solder is 40-50˚C higher than leaded solder.

### ■ Servicing solder

Solder with an alloy composition of Sn-3.0Ag-0.5Cu or Sn-0.7Cu is recommended.
Although servicing with leaded solder is possible, there are a few precautions that have to be taken. (Not taking these precautions may cause the solder to not harden properly, and lead to consequent malfunctions.)

**Precautions when using leaded solder**

- Remove all lead free solder from soldered joints when replacing components.
- If leaded solder should be added to existing lead free joints, mix in the leaded solder thoroughly after the lead free solder has been completely melted (do not apply the soldering iron without solder).

### ■ Servicing soldering iron

A soldering iron with a temperature setting capability (temperature control function) is recommended.
The melting point of lead free solder is higher than leaded solder. Use a soldering iron that maintains a high stable temperature (large heat capacity), and that allows temperature adjustment according to the part being serviced, to avoid poor servicing performance.

**Recommended soldering iron:**

- Soldering iron with temperature control function (temperature range: 320-450˚C)

Recommended temperature range per part:

| Part | Soldering iron temperature |
|---|---|
| Mounting (chips) on mounted PCB | 320˚C±30˚C |
| Mounting (chips) on empty PCB | 380˚C±30˚C |
| Chassis, metallic shield, etc. | 420˚C±30˚C |

**The PWB assembly which has used lead free solder**

(1) FILTER PWB, IR PWB, SW PWB, KEY PWB, SP TERMINAL(L/R) PWB
(2) INTERFACE, PWB
(3) VIDEO PWB
(4) FORMATTER PWB
(5) POWER BOARD

## ● Input Signal Formats

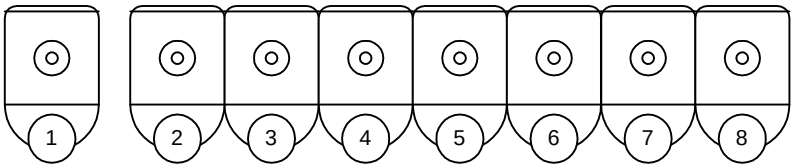
NT1: S and Composite of NTSC
NT2: Component of NTSC (Y,Cb,Cr)
NT3: Component of NTSC (Y,Pb,Pr)
NT4: Component of NTSC (Y,Cb,Cr)
NTSC: NTSC1-4
HD1-6: Component (shown in the table→)
HD7: Component of 1080i/60 (Y,Pb,Pr)
HD8: Component of 1080i/60 (Y,Cb,Cr)
HD9: Component of 576p (Y,Pb,Pr)
HD10: Component of 576p (Y,Cb,Cr)
HD: HD1-10 of Component
TV: NTSC / HD
PC: PC signal

| Video Input | System | Judgment of H.Frequency | Video Input Setup | Mode |
|---|---|---|---|---|
| AV1<br>AV2 | NTSC | 15.75kHz (480i) | Auto | NT1 |
| | | | DVD | NT1 |
| AV3 | NTSC | 15.75kHz (480i) | Auto | HD10 |
| | | | SDTV/DVD | HD10 |
| | | | HDTV | HD8 |
| AV4 | NTSC | 15.75kHz<br>31.5kHz<br>33.75kHz<br>45kHz<br>64kH | Auto | HD |
| | | | SDTV/DVD | HD |
| | | | HDTV | HD |
| | | | | |
| | | | | |
| | | | | |

# 5. ADJUSTMENT

## SERVICE (FACTORY) MODE ACCESS

The SSH2442 chassis has a Factory Mode, where the technician can access and adjust some of the color temperature settings. The Factory Mode has several different appearances, depending on the input signal.




Preliminary

1. To access the Factory Mode, the TV must be running.

Procedure

1. Press and hold the #6 button (PROGRAM ▲).
2. While continuing to hold the #6 button, press and hold the #1 button (SUB-POWER).
3. After both buttons have been held down for a minimum of five (5) seconds, first release the #1 button, then release the #6 button.
4. As stated previously, the input that the TV had selected at the time will determine which actual FACTORY MODE display will show up. (See below)

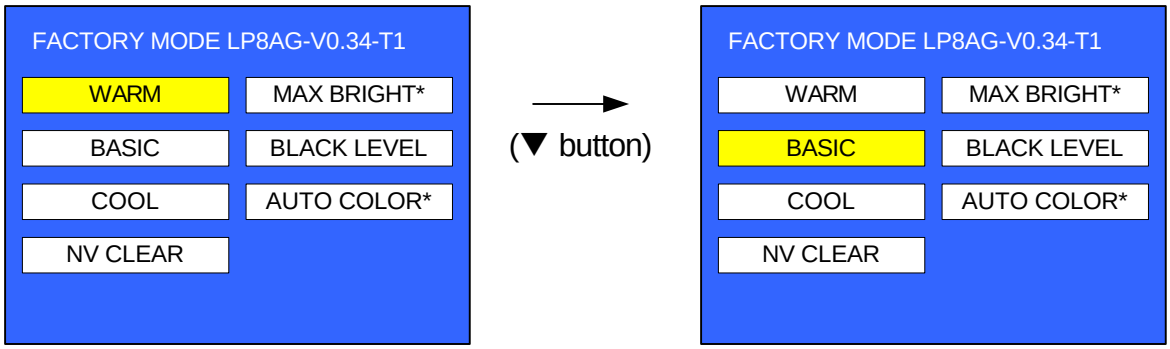
| | |
|---|---|
| INPUT: AV1, AV2, AV3, AV4, RGB2 (DVI-D) | FACTORY MODE LP8AG-V0.34-T1<br>WARM / MAX BRIGHT*<br>BASIC<br>COOL<br>NV CLEAR |
| INPUT: TUNER (ANTENNA/CABLE) | FACTORY MODE LP8AG-V0.34-T1<br>WARM / MAX BRIGHT*<br>BASIC<br>COOL<br>NV CLEAR / CHECK PANEL* |
| INPUT: RGB1 (VGA) | FACTORY MODE LP8AG-V0.34-T1<br>WARM / MAX BRIGHT*<br>BASIC / BLACK LEVEL<br>COOL / AUTO COLOR*<br>NV CLEAR |

** "MAX BRIGHT", "CHECK PANEL", and "AUTO COLOR" adjustments are not functional on this chassis version.*

# 5. ADJUSTMENT *(continued)*

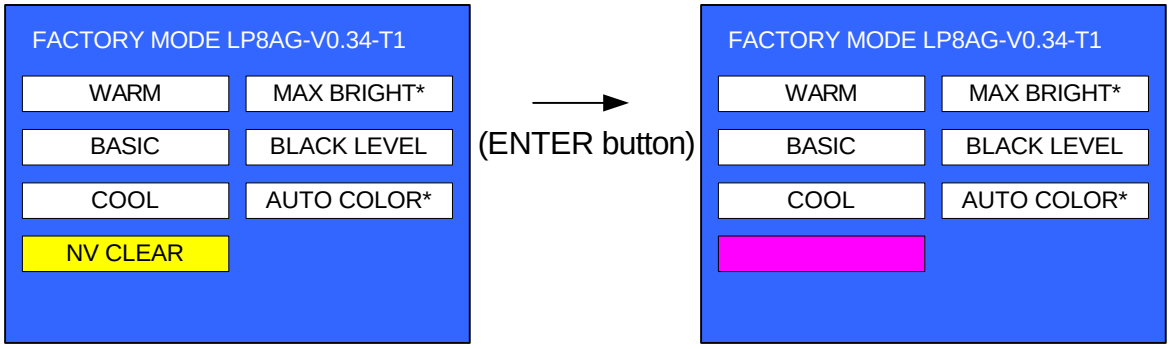
## FACTORY MODE NAVIGATION

To navigate through the different menu items, use the ▼ or ▲ button on the remote control. The menu items will be high-lighted yellow as navigation occurs. To access a particular adjustment parameter, use the ▶ button on the remote, which will cause a new menu to appear. To back up, or to exit from the Factory Mode, use the **MENU** button on the remote.




## NV CLEAR

NV CLEAR is used for re-initializing the microprocessor. Press the ▼ button on the remote to navigate to the block "NV CLEAR", then press the **ENTER** button on the remote. The color will change from yellow to magenta.

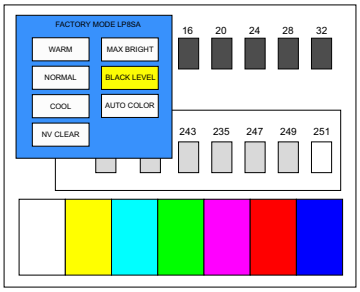


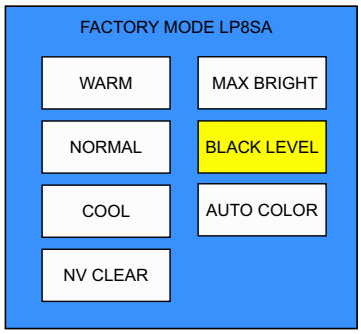

## COLOR TEMPERATURE ADJUSTMENTS

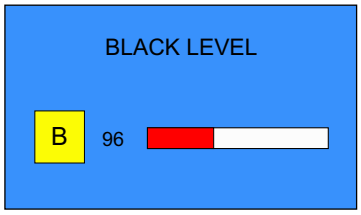
The following pages detail the procedures to make the color temperature adjustments. Note that a colorimetry meter (such as a Minolta CA-100) is **required** to measure the actual screen color temperature.
Example 1 - x=0.285 +/- 0.005, y=0.293 +/- 0.005 = Color Temp:9300K)
Example 2 - x=0.314 +/- 0.005, y=0.327 +/- 0.005 = Color Temp:6500K)

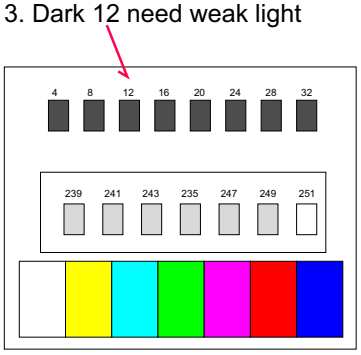
** "MAX BRIGHT", "CHECK PANEL", and "AUTO COLOR" adjustments are not functional on this chassis version.*

| Item | Black Level Adjustment | Adj point | |
|---|---|---|---|
| Adjustment Preparations | | Adjustment Procedures | | Remarks |
| (1) | Set info Fctory Adjustment mode | (1) | Perform the following adjustment with remote control | Envirment: 20lux or less |
| (2) | Input : RGB 1 VGA<br>Signal : VGA (31.5KHz) 0.7V<br>Windows ratio : 100%<br>(2004 Extron electronic infocom DEMO pattern) | (2) | Set the CRT analyzer (CA100) at center of panel | Color temperature should be adjusted under the condition in which the screen is brightest, thus the initial value of adjustment is it's maximum value. |
| (3) | Confirm that the screen size is "Full" | (3) | After receiving pc signal, set down the one among adjustments and adjustment the value. | Only reducing the brightness controls the adjustment, thus weaken the brighter color to adjust. |
| | | (4) | Start the FACTORY mode,<br>1. Use ▲▼/ ENTER button select "WARM" mode.<br>2. Push ◀▶ and adjustment adjustment "B level"<br>3. Dark 12 need weak light | |



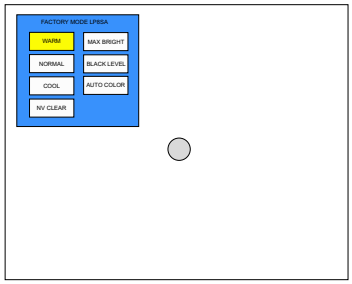



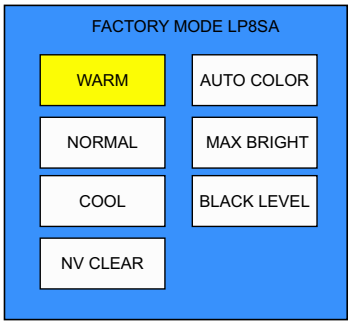
| Item | Color Temperature Adjustment (Warm) | Adj point | |
|---|---|---|---|
| Adjustment Preparations | Adjustment Procedures | Remarks | |

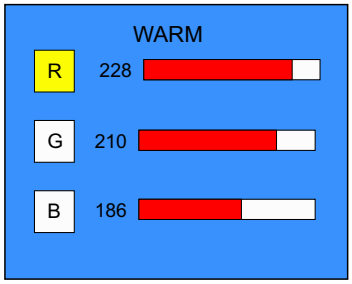
(1) Set info Fctory Adjustment mode

(2) Input : RGB 1 VGA
Signal : VGA (31.5KHz) 0.7V
Windows ratio : 100%
Use White pattern

(3) Confirm that the screen size is "Full"

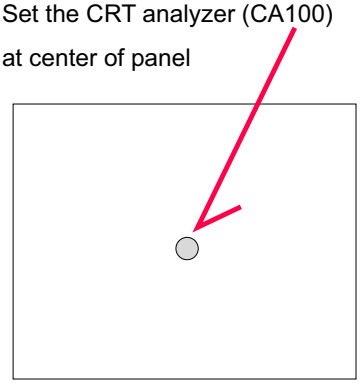



(1) Perform the following adjustment with remote control

(2) Set the CRT analyzer (CA100) at center of panel



(3) After receiving pc signal, set down the one among adjustments and adjustment the value.

(4) Start the FACTORY mode,
1. Use ▲▼/ ENTER button select "WARM" mode.
2. Push ◀▶ and adjustment adjustment "R" level
3. If adjutment "G" and "B" please repeat 1~2 steps.

<Specification>
Video color tempertaure (WARM)

x=0.314±0.005

y=0.327±0.005

(Color Temp:6500°K±0MPCD)

Envirment:
20lux or less

Color temperature should be adjusted under the condition in which the screen is brightest, thus the initial value of adjustment is it's maximum value.

Only reducing the brightness controls the adjustment, thus weaken the brighter color to adjust.

Color mode while the Warm mode while the following is selected

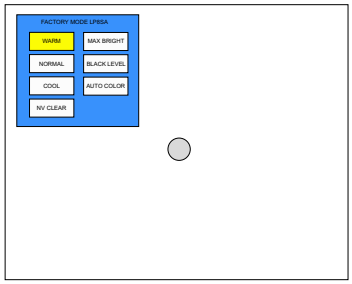
| Item | Color Temperature Adjustment (Normal) | Adj point | |
|---|---|---|---|
| Adjustment Preparations | Adjustment Procedures | Remarks | |

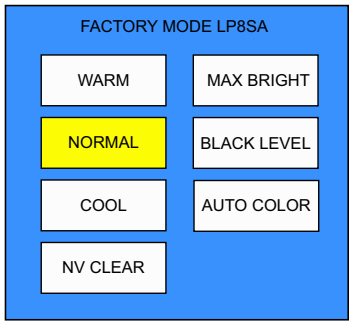
**Adjustment Preparations**

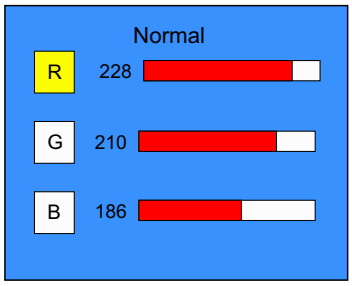
(1) Set info Fctory Adjustment mode

(2) Input : RGB 1 VGA
Signal : VGA (31.5KHz) 0.7V
Windows ratio : 100%
Use White pattern

(3) Confirm that the screen size is "Full"



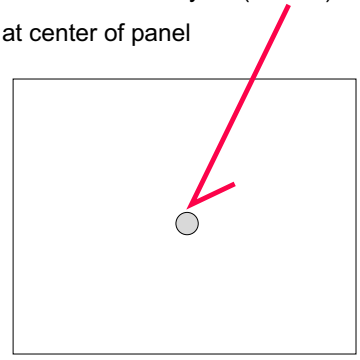




**Adjustment Procedures**

(1) Perform the following adjustment with remote control

(2) Set the CRT analyzer (CA100) at center of panel



(3) After receiving pc signal, set down the one among adjustments and adjustment the value.

(4) Start the FACTORY mode,
1. Use ▲▼/ ENTER button select "Normal" mode.
2. Push ◀▶ and adjustment adjustment "R" level
3. If adjutment "G" and "B" please repeat 1~2 steps.

<Specification>
Video color tempertaure (Normal)

x=0.285±0.005

y=0.293±0.005

(Color Temp:9300°K±0MPCD)

**Remarks**

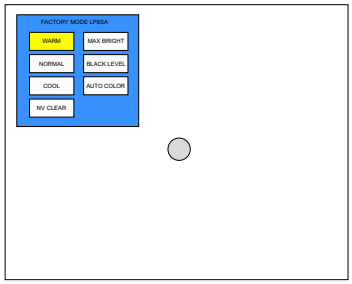
Envirment:
20lux or less

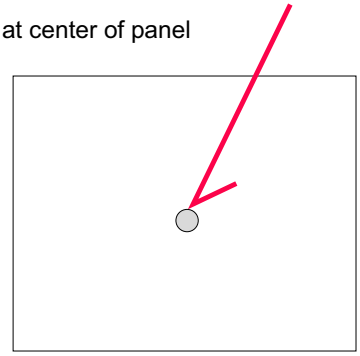
Color temperature should be adjusted under the condition in which the screen is brightest, thus the initial value of adjustment is it's maximum value.

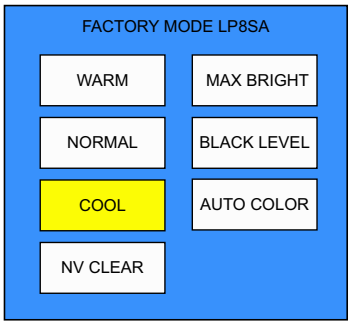
Only reducing the brightness controls the adjustment, thus weaken the brighter color to adjust.

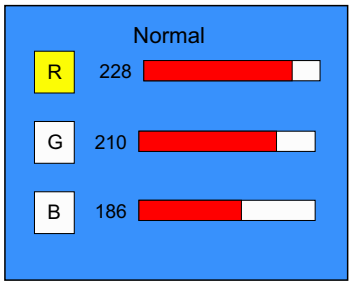
Color mode while the Normal mode while the following is selected

| Item | Color Temperature Adjustment (Cool) | Adj point | |
|---|---|---|---|
| Adjustment Preparations | | Adjustment Procedures | Remarks |
| (1) Set info Fctory Adjustment mode<br>(2) Input : RGB 1 VGA<br>Signal : VGA (31.5KHz) 0.7V<br>Windows ratio : 100%<br>Use White pattern<br>(3) Confirm that the screen size is "Full" | | (1) Perform the following adjustment with remote control<br>(2) Set the CRT analyzer (CA100) at center of panel | Envirment:<br>20lux or less |
| | | | Color temperature should be adjusted under the condition in which the screen is brightest, thus the initial value of adjustment is it's maximum value. |
| | | (3) After receiving pc signal, set down the one among adjustments and adjustment the value. | Only reducing the brightness controls the adjustment, thus weaken the brighter color to adjust. |
| | | (4) Start the FACTORY mode,<br>1. Use ▲▼/ ENTER button select "Cool" mode.<br>2. Push ◀▶ and adjustment adjustment "R" level<br>3. If adjutment "G" and "B" please repeat 1~2 steps. | Color mode while the Cool mode while the following is selected |






<Specification>
Video color tempertaure (Cool)

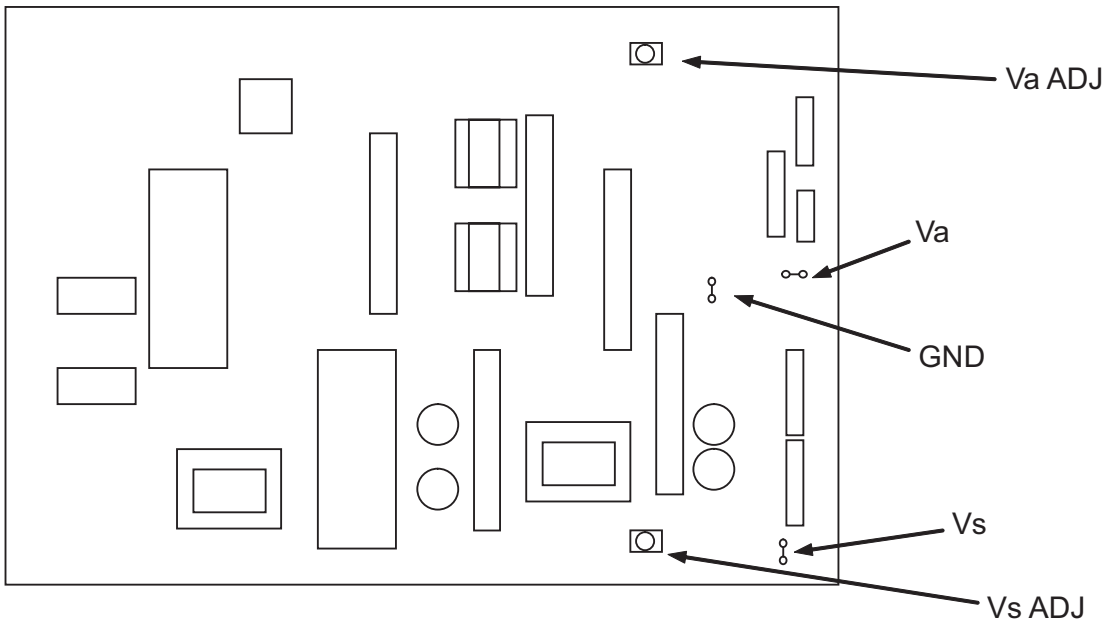
x=0.268±0.005

y=0.283±0.005

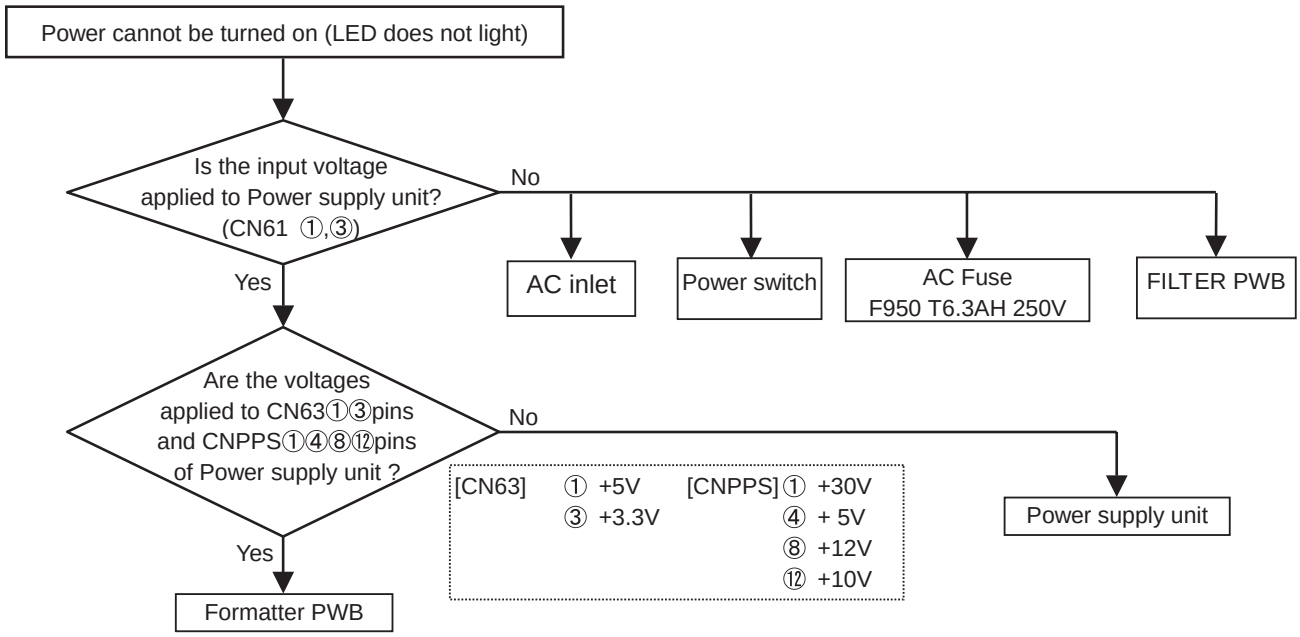
(Color Temp:12000°K±0MPCD)

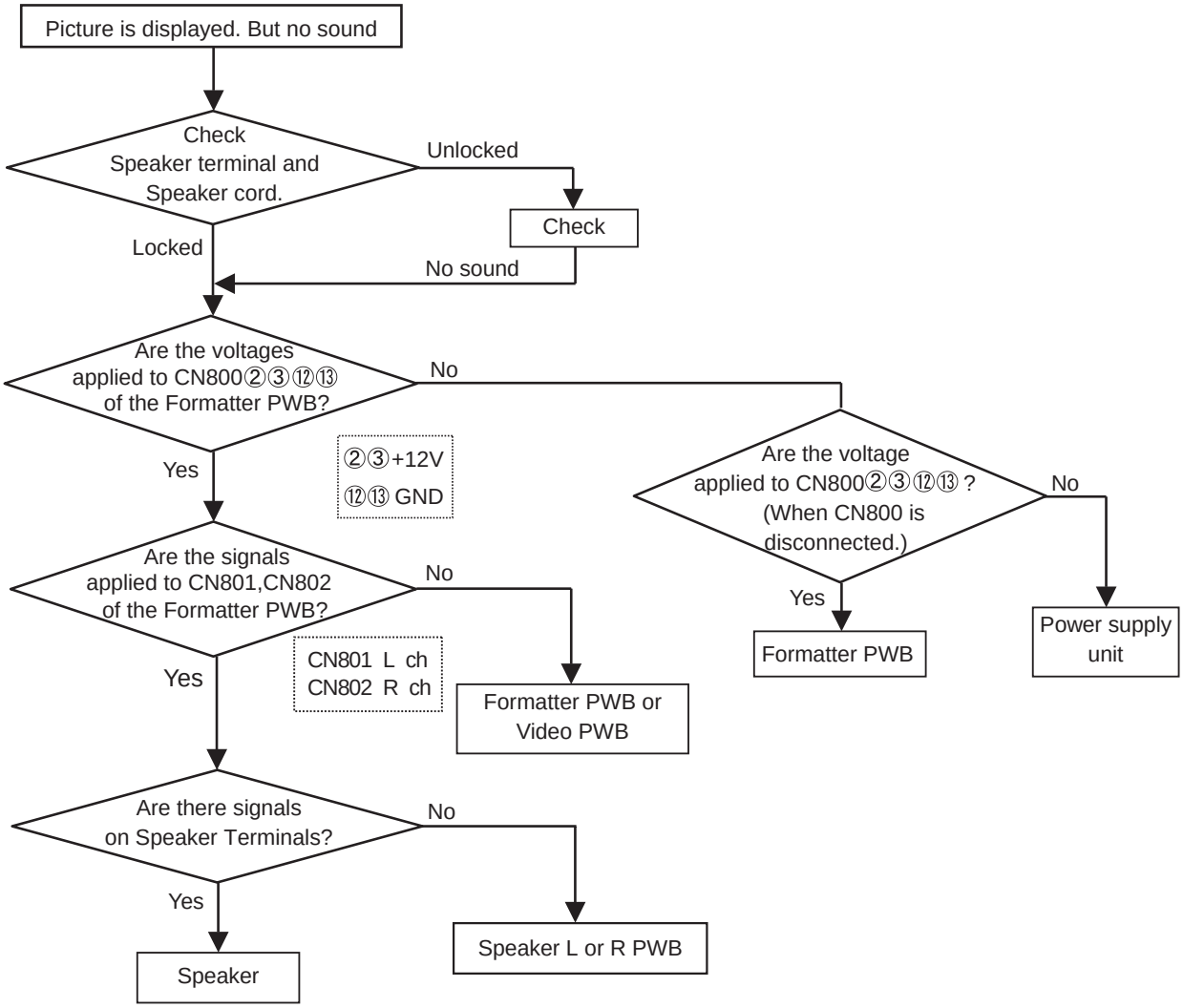
| Item | Power Unit Vs, Va Adjustment | | | Adj. point | Refer the figure below |
|---|---|---|---|---|---|
| Adjustment Preparations | | Adjustment Procedures | | Remarks | |
| (1) | Turn on the set and perform pre-heat run more than 1 min with burn-in screen. | (1) | Turn Vs ADJ to adjust Vs voltage to be within ±0.1V of the value specified in the label on the panel. | Permissive level of voltage in sufficient time of heat-run performed is:<br>Vs: within±0.45V<br>Va: within±0.55V | |
| (2) | Receive full back pattern signal<br>(or Video silence signal; it will be automatically turned off after a few seconds by power save function.) | (2) | Turn Va ADJ to adjust Va voltage to be within ±0.2V of the value specified in the label on the panel. | | |
| (3) | Connect voltmeter leads to Vs (or Va) and GND test points of the power unit. | (3) | Reconfirm that Vs voltage remains within ±0.1V of the specified value. Readjust if it' s outside of the margin. | | |
| | | | Label example<br><LOT>N6<br>Vs= 185.0V<br>Va=65.0V | Label position (Reference)<br>Upper right<br><br>If it' s hard to read the voltage value because of the wiring,<br>highlight it in advance to be visible. | |

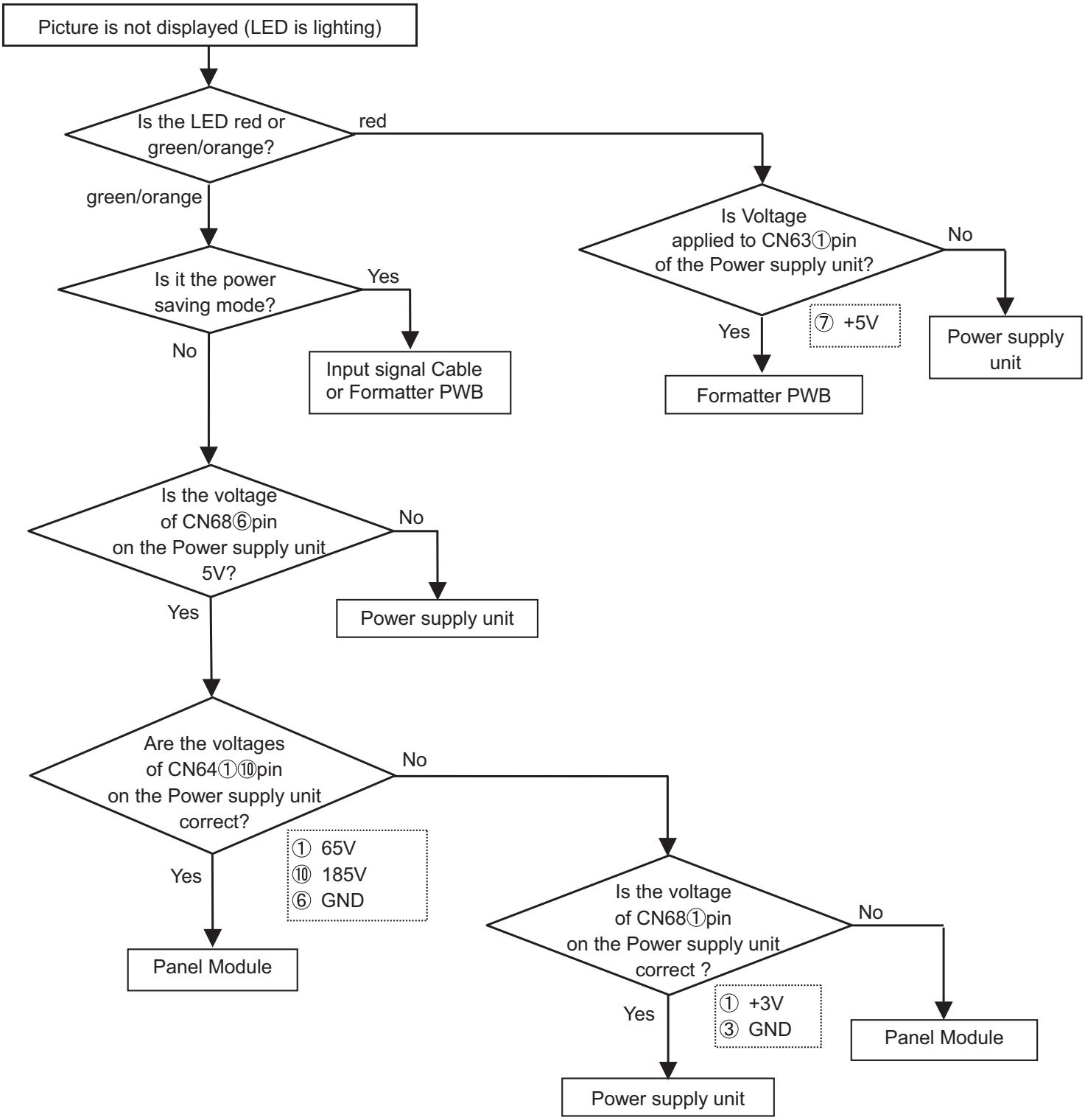
Power unit for WVGA



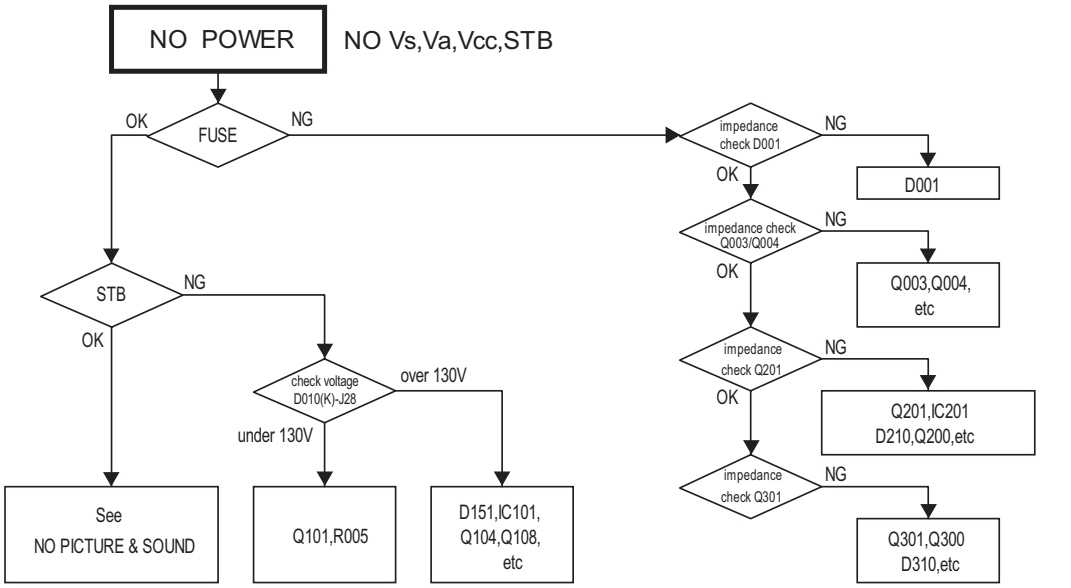
## ● Flow Chart

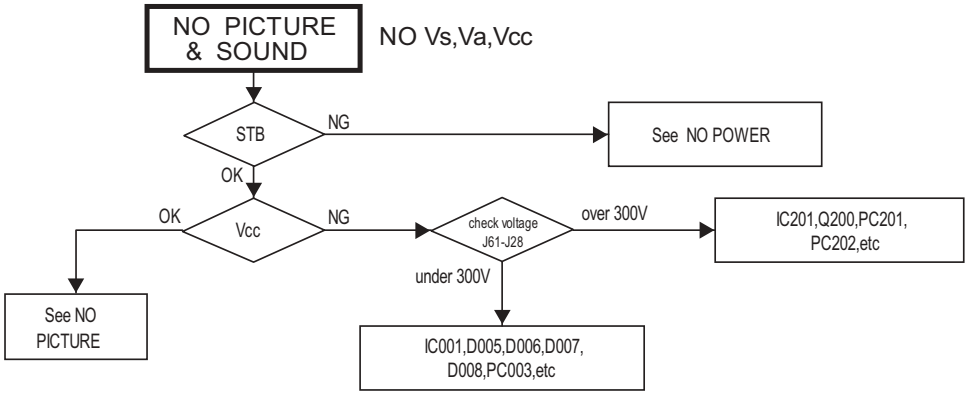

Power cannot be turned on (LED does not light)
Is the input voltage applied to Power supply unit? (CN61 ①,③)
No
AC inlet
Power switch
AC Fuse F950 T6.3AH 250V
FILTER PWB
Yes
Are the voltages applied to CN63①③pins and CNPPS①④⑧⑫pins of Power supply unit ?
No
[CN63] ① +5V ③ +3.3V
[CNPPS] ① +30V ④ + 5V ⑧ +12V ⑫ +10V
Power supply unit
Yes
Formatter PWB

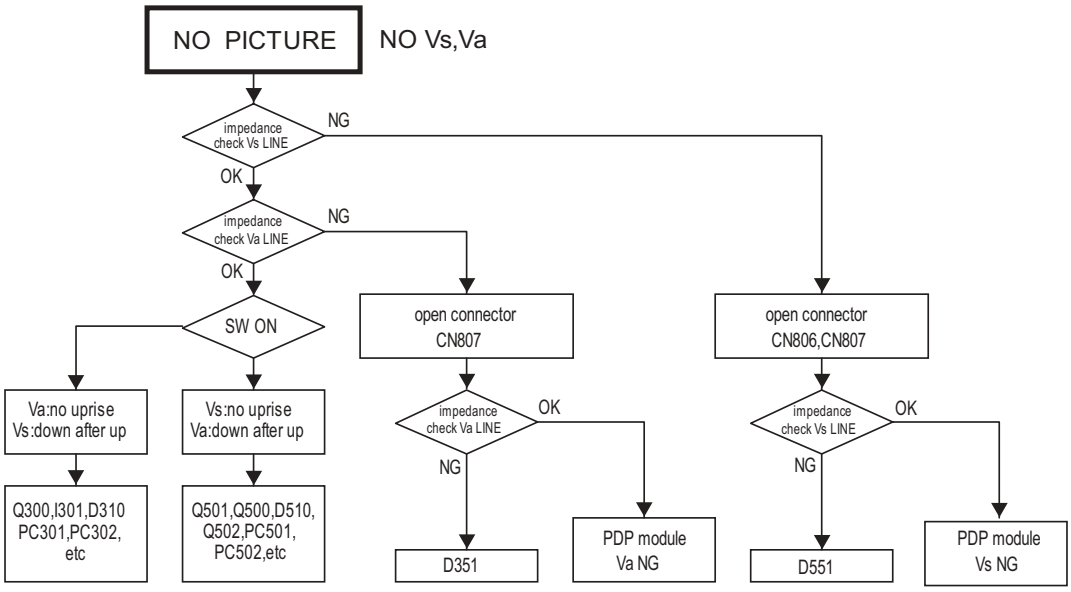

Picture is displayed. But no sound
Check Speaker terminal and Speaker cord.
Unlocked
Check
Locked
No sound
Are the voltages applied to CN800②③⑫⑬ of the Formatter PWB?
No
②③+12V
⑫⑬ GND
Yes
Are the voltage applied to CN800②③⑫⑬ ? (When CN800 is disconnected.)
No
Yes
Formatter PWB
Power supply unit
Are the signals applied to CN801,CN802 of the Formatter PWB?
No
CN801 L ch
CN802 R ch
Formatter PWB or Video PWB
Yes
Are there signals on Speaker Terminals?
No
Yes
Speaker L or R PWB
Speaker


Picture is not displayed (LED is lighting)
Is the LED red or green/orange?
red
green/orange
Is it the power saving mode?
Yes
No
Input signal Cable or Formatter PWB
Is Voltage applied to CN63①pin of the Power supply unit?
No
Yes
⑦ +5V
Power supply unit
Formatter PWB
Is the voltage of CN68⑥pin on the Power supply unit 5V?
No
Yes
Power supply unit
Are the voltages of CN64①⑩pin on the Power supply unit correct?
No
Yes
① 65V
⑩ 185V
⑥ GND
Panel Module
Is the voltage of CN68①pin on the Power supply unit correct ?
No
Yes
① +3V
③ GND
Panel Module
Power supply unit

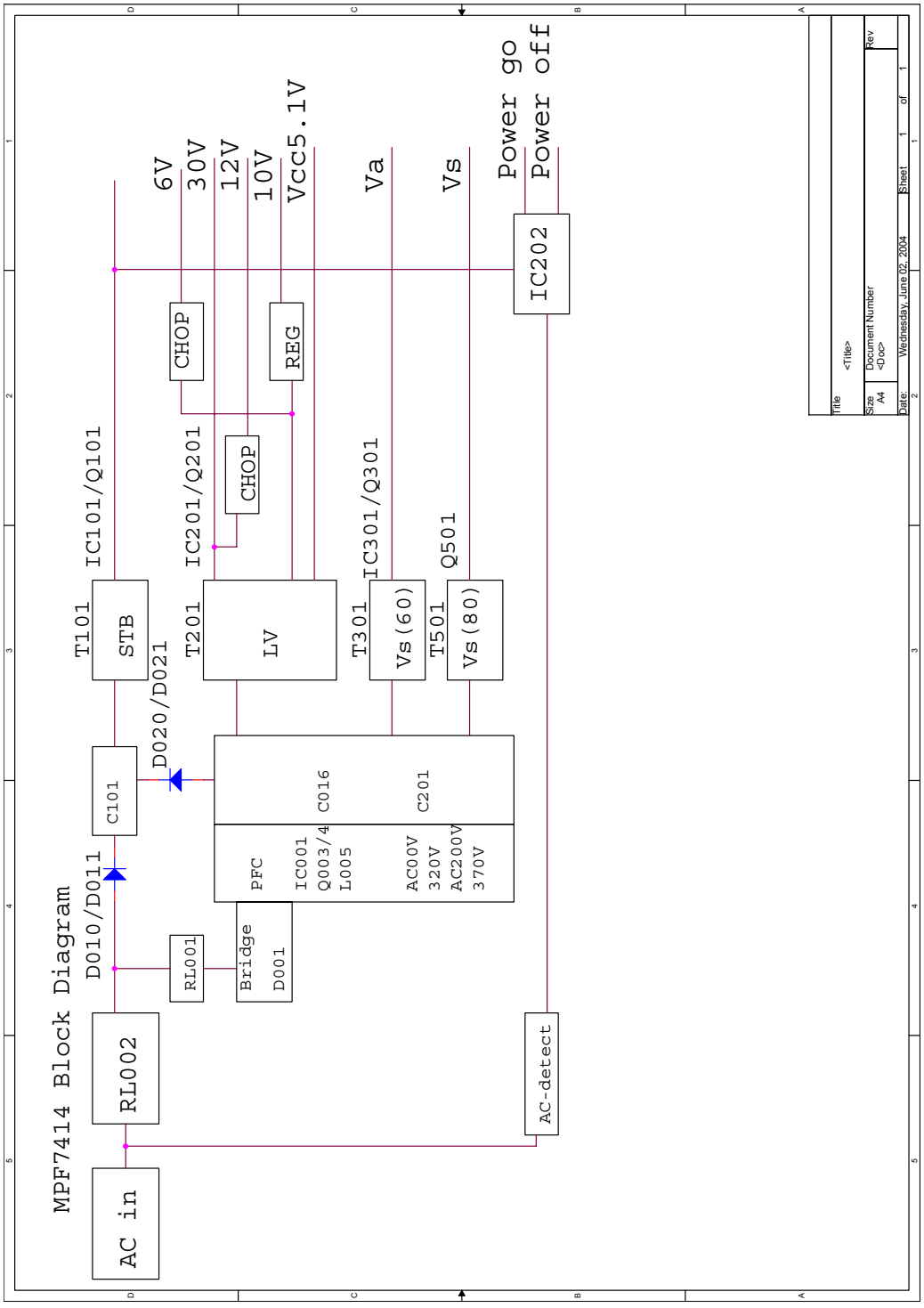
[ POWER BOARD ]

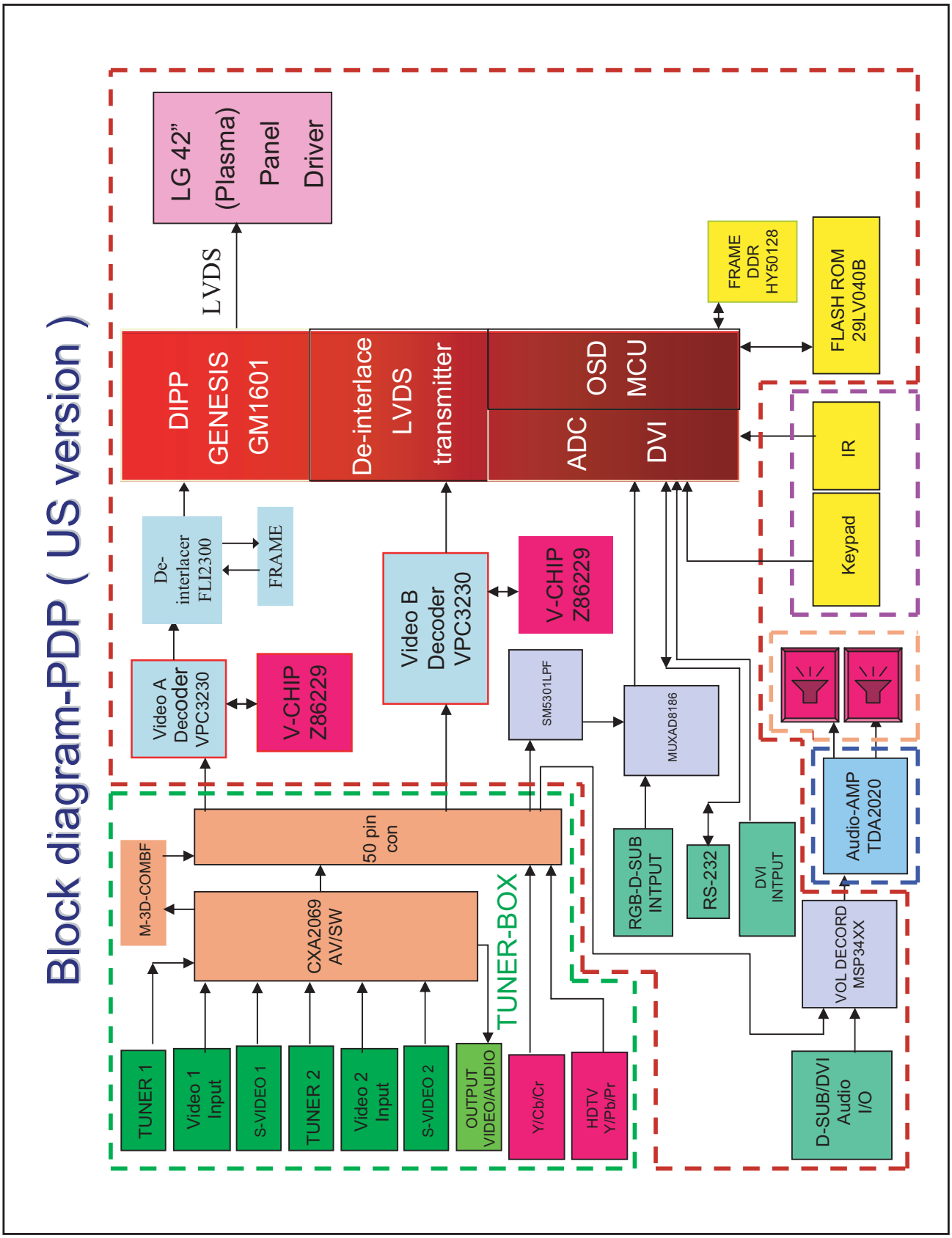

NO POWER
NO Vs,Va,Vcc,STB
FUSE
OK
NG
impedance check D001
D001
impedance check Q003/Q004
Q003,Q004, etc
impedance check Q201
Q201,IC201 D210,Q200,etc
impedance check Q301
Q301,Q300 D310,etc
STB
See NO PICTURE & SOUND
check voltage D010(K)-J28
over 130V
under 130V
Q101,R005
D151,IC101, Q104,Q108, etc

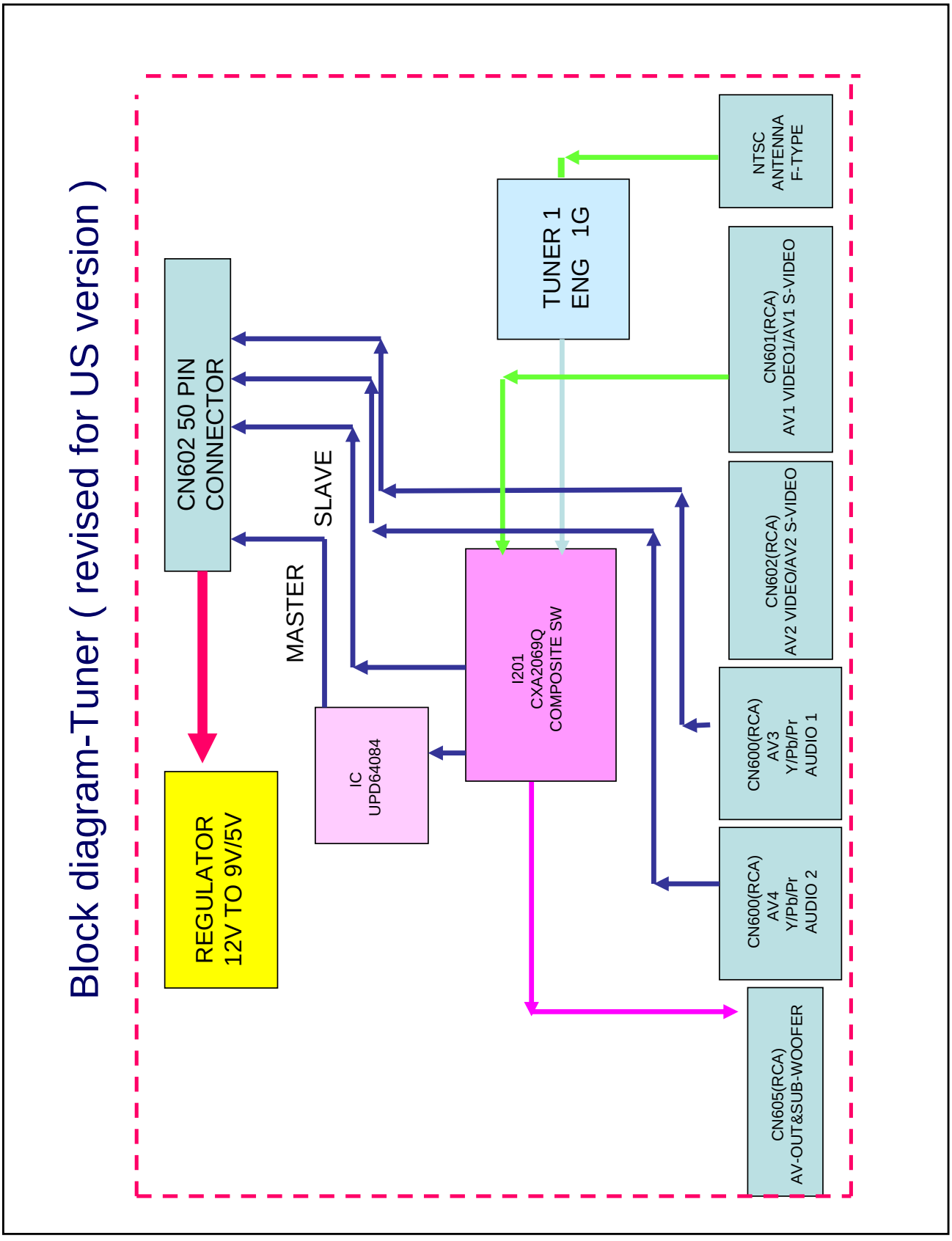

NO PICTURE & SOUND
NO Vs,Va,Vcc
STB
See NO POWER
Vcc
See NO PICTURE
check voltage J61-J28
over 300V
IC201,Q200,PC201, PC202,etc
under 300V
IC001,D005,D006,D007, D008,PC003,etc

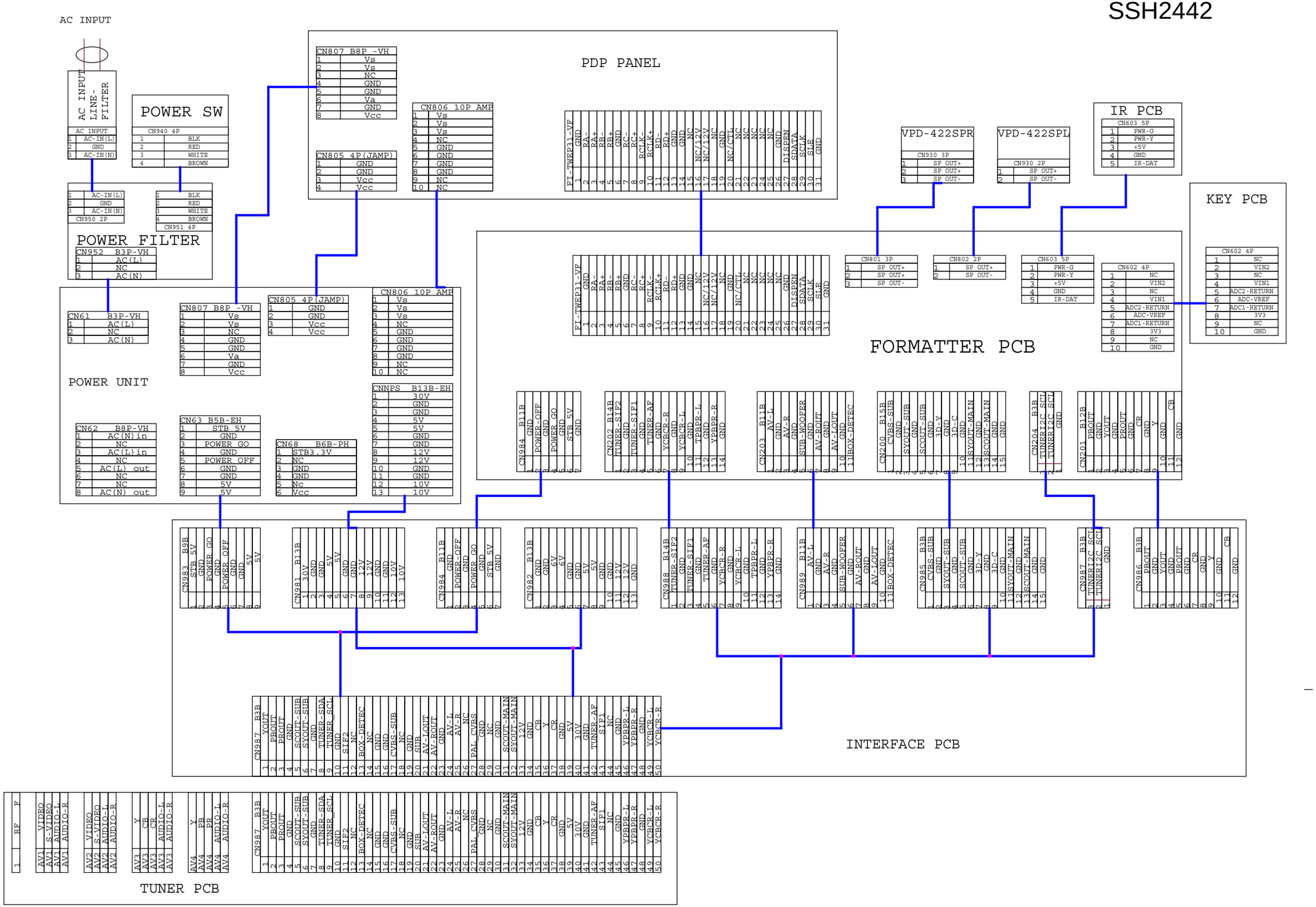

NO PICTURE
NO Vs,Va
impedance check Vs LINE
impedance check Va LINE
SW ON
Va:no uprise Vs:down after up
Q300,I301,D310 PC301,PC302, etc
Vs:no uprise Va:down after up
Q501,Q500,D510, Q502,PC501, PC502,etc
open connector CN807
D351
PDP module Va NG
open connector CN806,CN807
D551
PDP module Vs NG

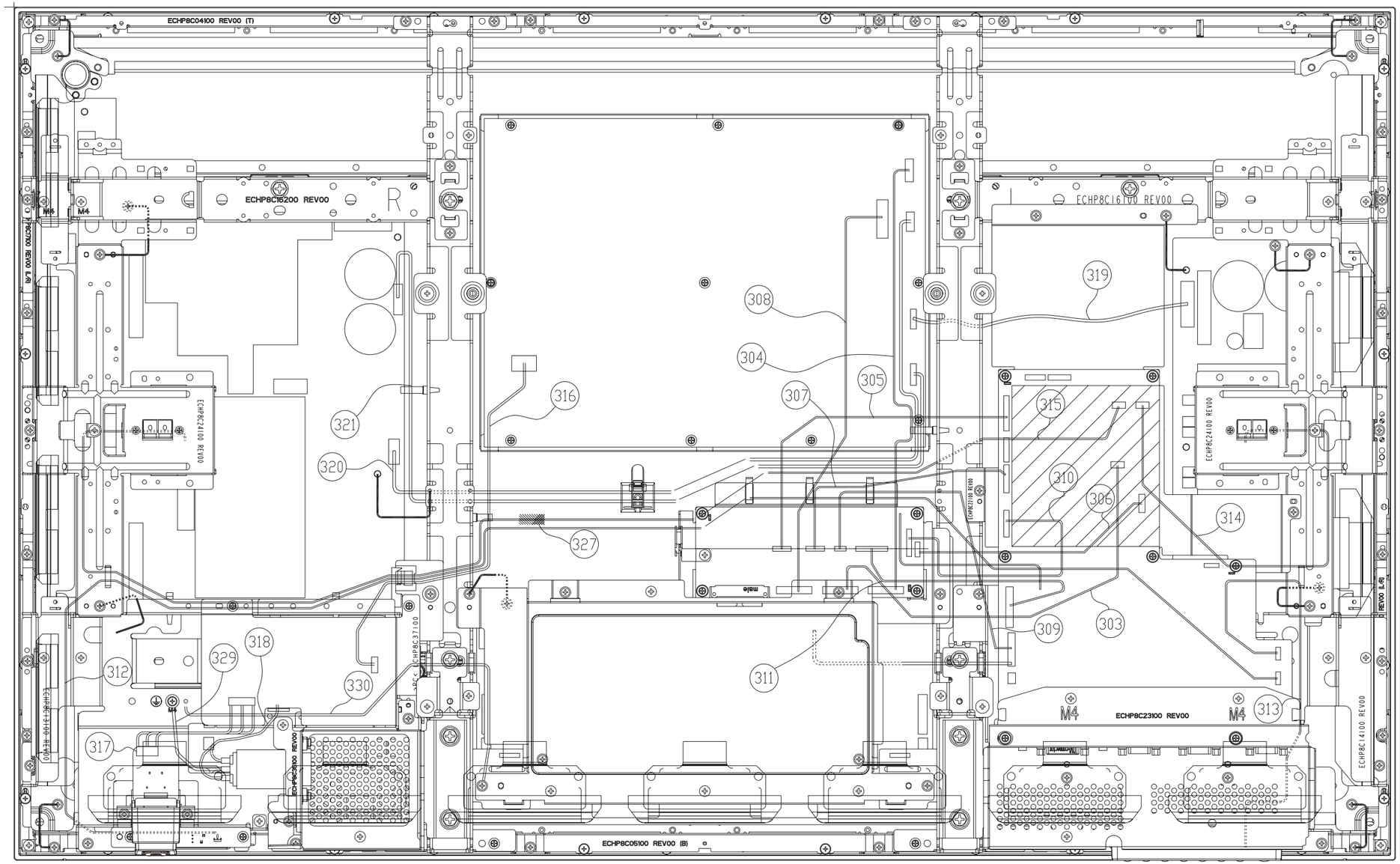
# 7. Block diagram

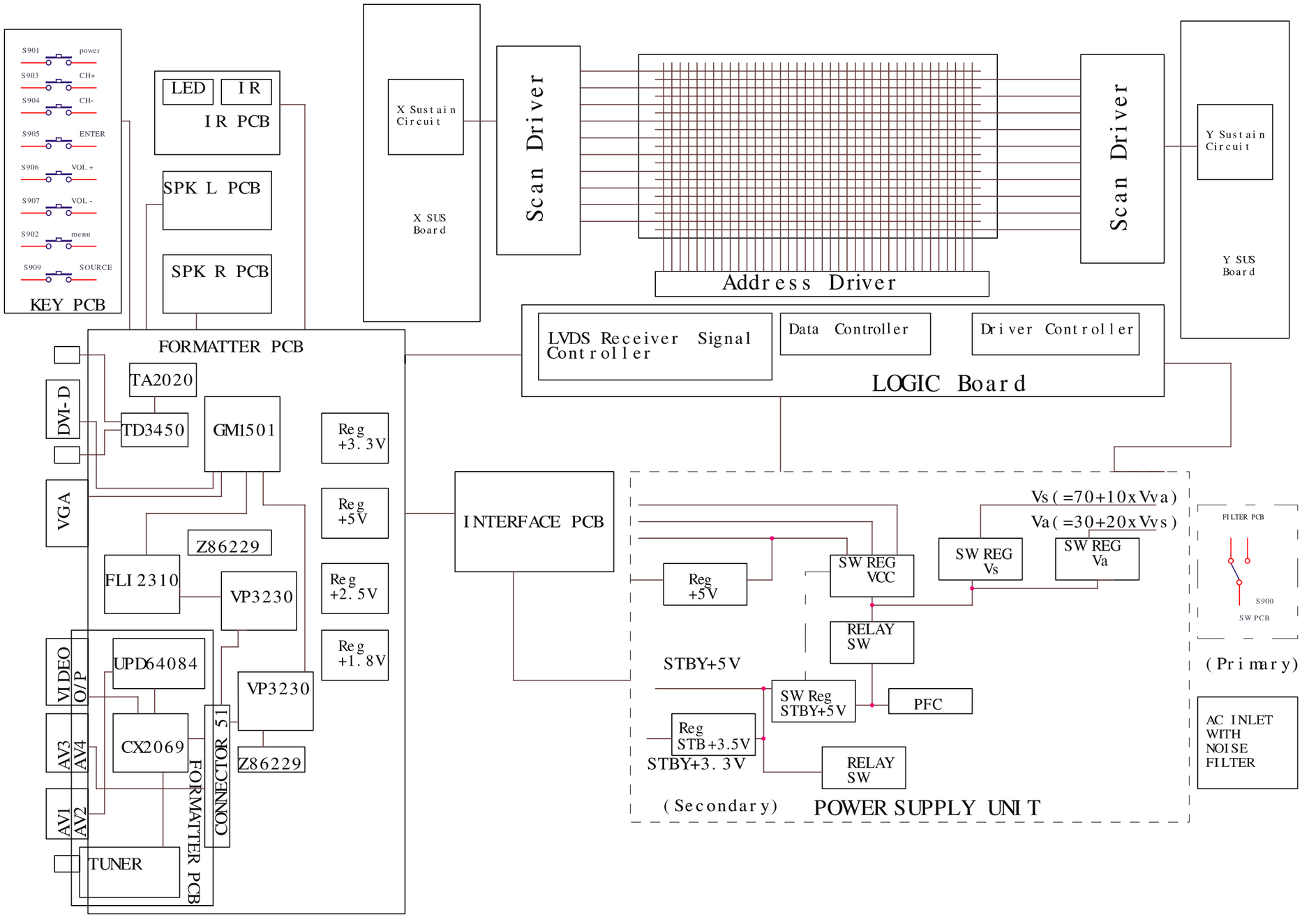


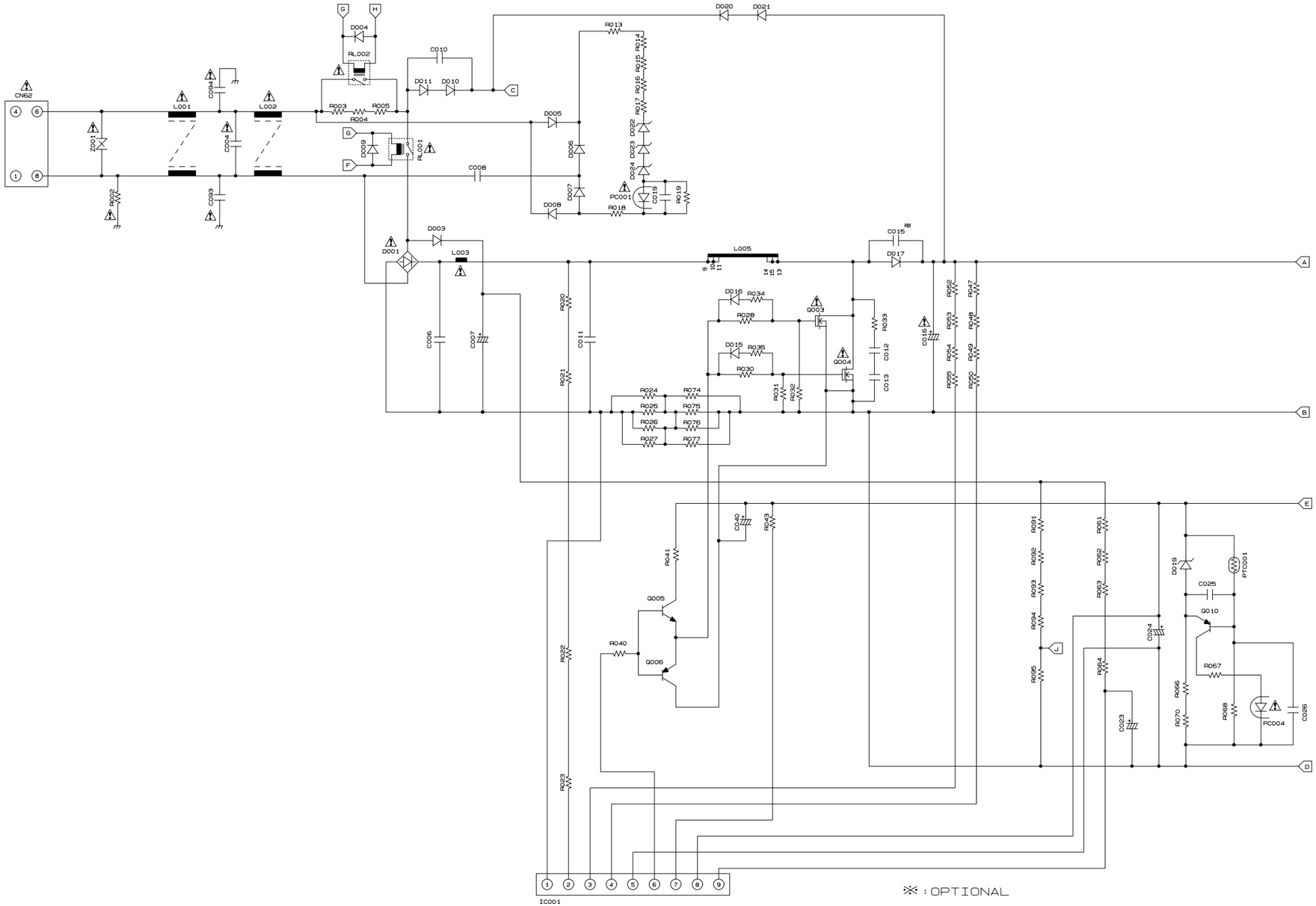

Block diagram-PDP ( US version )
LG 42" (Plasma) Panel Driver
LVDS
DIPP GENESIS GM1601
De-interlace LVDS transmitter
ADC
OSD MCU
DVI
FRAME DDR HY50128
FLASH ROM 29LV040B
IR
Keypad
De-interlacer FLI2300
FRAME
Video A Decoder VPC3230
V-CHIP Z86229
Video B Decoder VPC3230
V-CHIP Z86229
SM5301LPF
MUXAD8186
Audio-AMP TDA2020
50 pin con
M-3D-COMBF
CXA2069 AV/SW
TUNER-BOX
RGB-D-SUB INTPUT
RS-232
DVI INTPUT
VOL DECORD MSP34XX
D-SUB/DVI Audio I/O
TUNER 1
Video 1 Input
S-VIDEO 1
TUNER 2
Video 2 Input
S-VIDEO 2
OUTPUT VIDEO/AUDIO
Y/Cb/Cr
HDTV Y/Pb/Pr

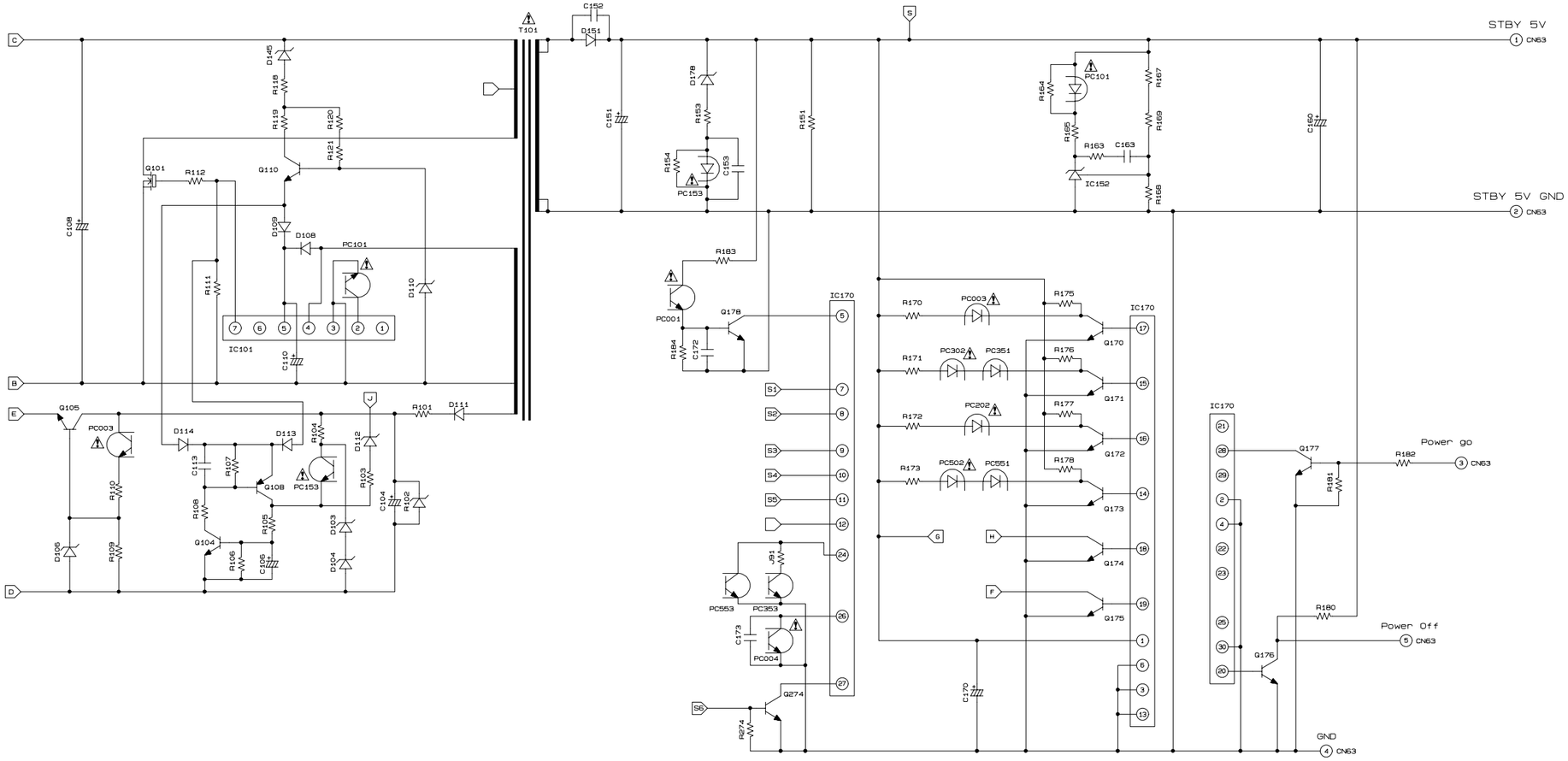

Block diagram-Tuner ( revised for US version )
CN602 50 PIN CONNECTOR
REGULATOR 12V TO 9V/5V
MASTER
SLAVE
IC UPD64084
I201 CXA2069Q COMPOSITE SW
TUNER 1 ENG 1G
NTSC ANTENNA F-TYPE
CN601(RCA) AV1 VIDEO1/AV1 S-VIDEO
CN602(RCA) AV2 VIDEO/AV2 S-VIDEO
CN600(RCA) AV3 Y/Pb/Pr AUDIO 1
CN600(RCA) AV4 Y/Pb/Pr AUDIO 2
CN605(RCA) AV-OUT&SUB-WOOFER

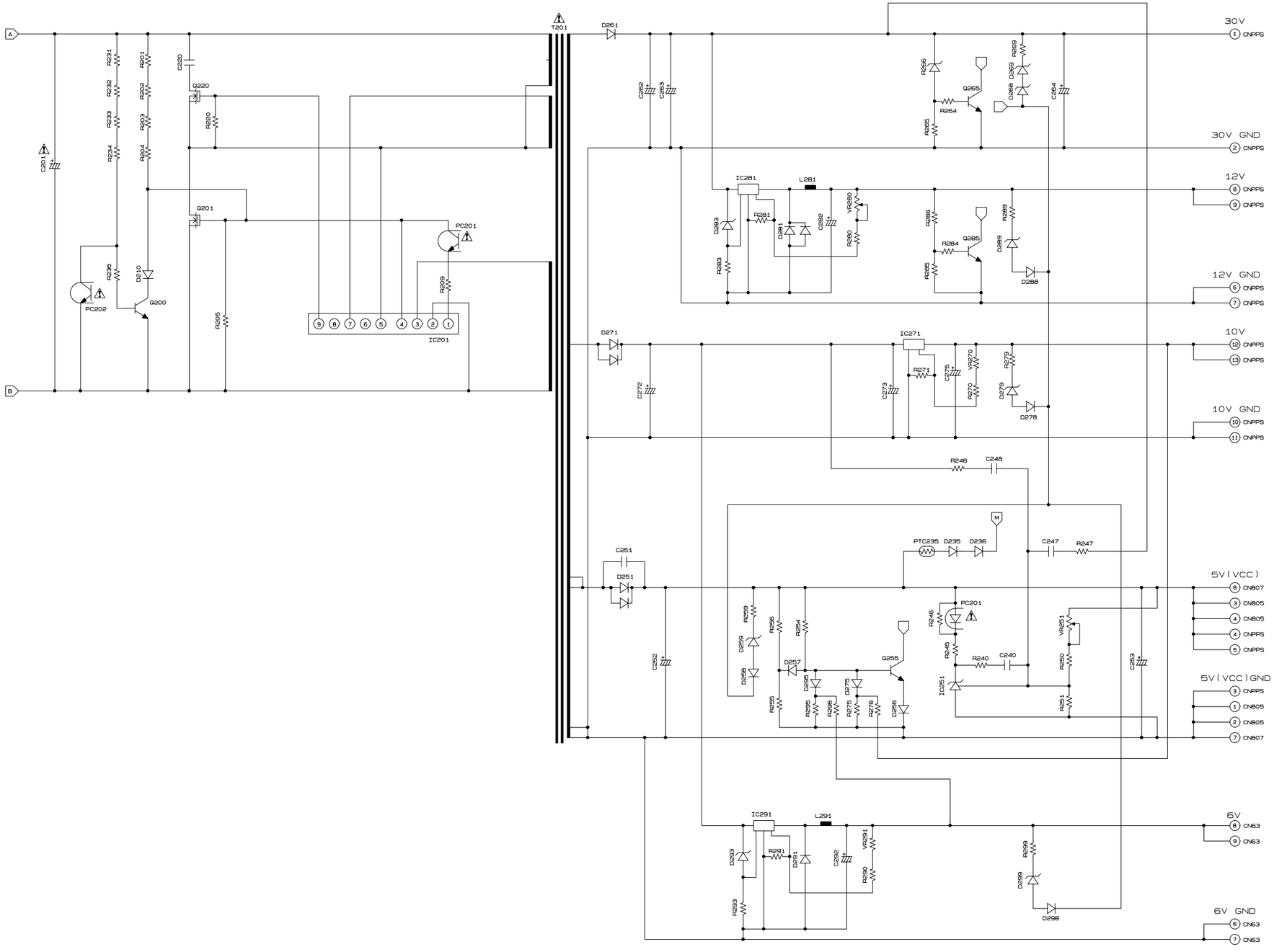

AC INPUT
AC INPUT LINE-FILTER
AC INPUT
1 AC-IN(L)
2 GND
3 AC-IN(N)
POWER SW
CN940 4P
1 BLK
2 RED
3 WHITE
4 BROWN
1 AC-IN(L)
2 GND
3 AC-IN(N)
CN950 2P
1 BLK
2 RED
3 WHITE
4 BROWN
CN951 4P
POWER FILTER
CN952 B3P-VH
1 AC(L)
2 NC
3 AC(N)
PDP PANEL
CN807 B8P -VH
1 Vs
2 Vs
3 NC
4 GND
5 GND
6 Va
7 GND
8 Vcc
CN805 4P(JAMP)
1 GND
2 GND
3 Vcc
4 Vcc
CN806 10P AMP
1 Vs
2 Vs
3 Vs
4 NC
5 GND
6 GND
7 GND
8 GND
9 NC
10 NC
PT-TWEP31-VF
1 GND
2 RA-
3 RA+
4 RB-
5 RB+
6 GND
7 RC-
8 RC+
9 RCLK-
10 RCLK+
11 RD-
12 RD+
13 GND
14 GND
15 NC/12V
16 NC/12V
17 NC
18 GND
19 NC/CTL
20 NC
21 NC
22 NC
23 NC
24 GND
25 DISPEN
26 SDATA
27 SCLK
28 SLE
29 GND
30
31
VPD-422SPR
CN930 3P
1 SP OUT+
2 SP OUT+
3 SP OUT-
VPD-422SPL
CN930 2P
1 SP OUT+
2 SP OUT-
IR PCB
CN603 5P
1 PWR-G
2 PWR-Y
3 +5V
4 GND
5 IR-DAT
KEY PCB
CN602 4P
1 NC
2 VIN2
3 NC
4 VIN1
5 ADC2-RETURN
6 ADC-VREF
7 ADC1-RETURN
8 3V3
9 NC
10 GND
FORMATTER PCB
CN801 3P
CN802 2P
CN603 5P
CN602 4P
POWER UNIT
CN61 B3P-VH
1 AC(L)
2 NC
3 AC(N)
CN807 B8P -VH
CN805 4P(JAMP)
CN806 10P AMP
CNNPS B13B-EH
1 30V
2 GND
3 GND
4 5V
5 5V
6 GND
7 GND
8 12V
9 12V
10 GND
11 GND
12 10V
13 10V
CN62 B8P-VH
1 AC(N)in
2 NC
3 AC(L)in
4 NC
5 AC(L) out
6 NC
7 NC
8 AC(N) out
CN63 B5B-EH
1 STB 5V
2 GND
3 POWER GO
4 GND
5 POWER OFF
6 GND
7 GND
8 5V
9 5V
CN68 B6B-PH
1 STB3.3V
2 NC
3 GND
4 GND
5 Nc
6 Vcc
CN984 B11B
CN202 B14B
CN203 B11B
CN200 B15B
CN204 B3B
CN201 B12B
INTERFACE PCB
CN983 B9B
CN981 B13B
CN984 B11B
CN982 B13B
CN988 B14B
CN989 B11B
CN985 B3B
CN987 B3B
CN986 B3B
CN987 B3B
TUNER PCB
1 RF F
AV1 VIDEO
AV1 S-VIDEO
AV1 AUDIO-L
AV1 AUDIO-R
AV2 VIDEO
AV2 S-VIDEO
AV2 AUDIO-L
AV2 AUDIO-R
AV3 Y
AV3 CB
AV3 CR
AV3 AUDIO-L
AV3 AUDIO-R
AV4 Y
AV4 PB
AV4 PR
AV4 AUDIO-L
AV4 AUDIO-R
CN987 B3B

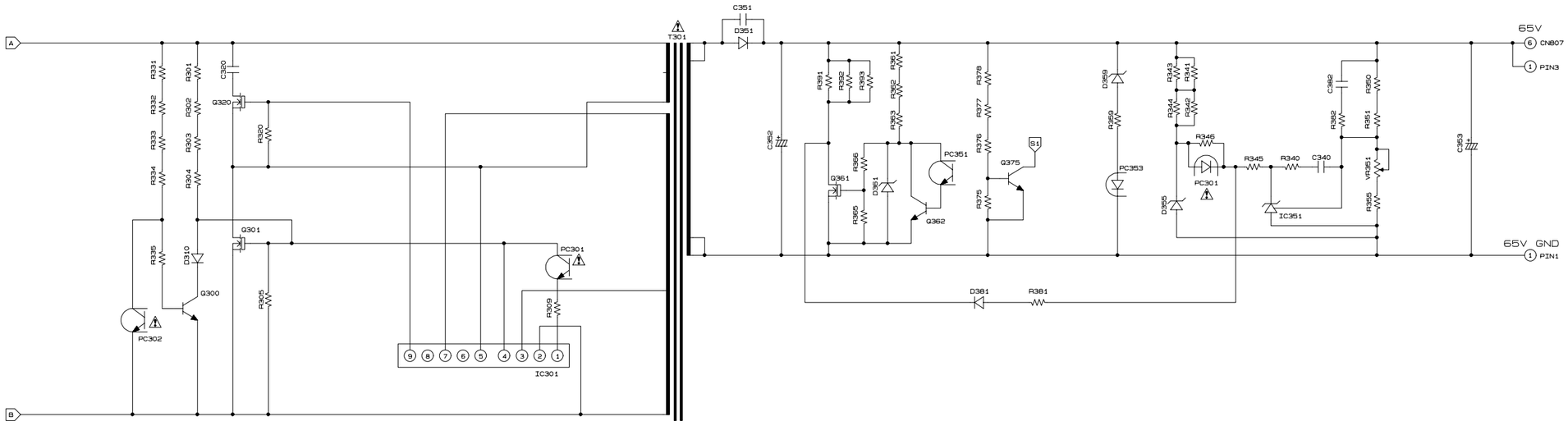

ECHP8C04100 REV00 (T)
ECHP8C16200 REV00
ECHP8C16100 REV00
ECHP8C24100 REV00
ECHP8C27100 REV00
ECHP8C37100
ECHP8C23100 REV00
ECHP8C14100 REV00
ECHP8C13100 REV00
ECHP8C05100 REV00 (B)
M4
M6
308
304
305
307
316
321
320
327
319
315
310
306
314
309
303
311
313
318
329
312
330
317

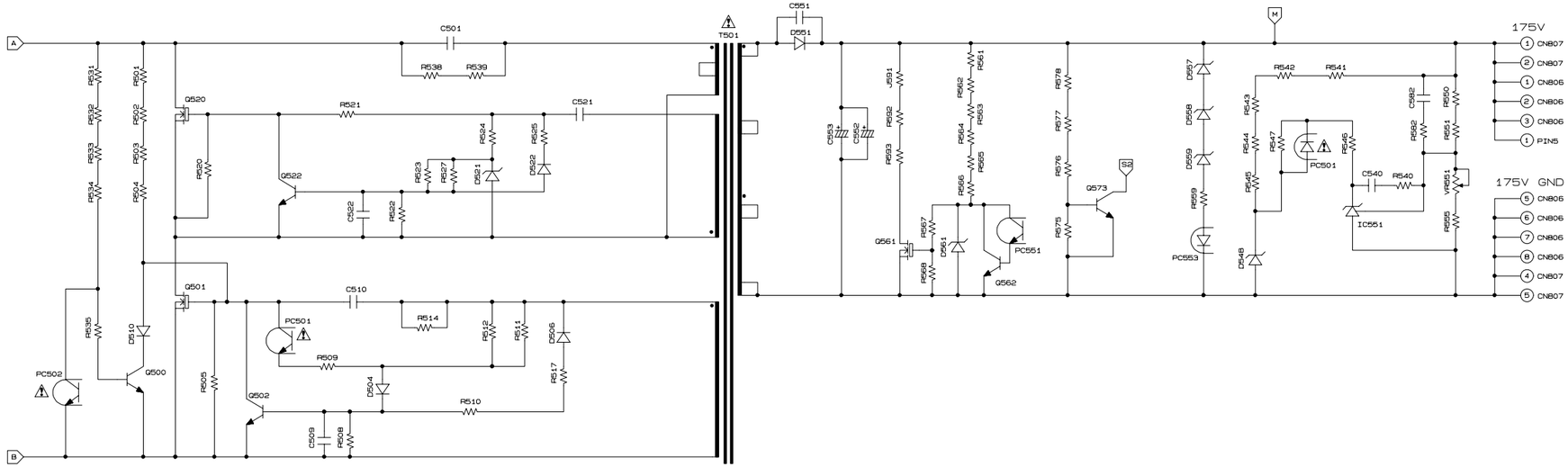

S901 power
S903 CH+
S904 CH-
S905 ENTER
S906 VOL +
S907 VOL -
S902 menu
S909 SOURCE
KEY PCB
LED
IR
IR PCB
SPK L PCB
SPK R PCB
X Sustain Circuit
X SUS Board
Scan Driver
Address Driver
Scan Driver
Y Sustain Circuit
Y SUS Board
LVDS Receiver Signal Controller
Data Controller
Driver Controller
LOGIC Board
FORMATTER PCB
TA2020
DVI-D
TD3450
GM1501
Reg +3.3V
VGA
Reg +5V
Z86229
FLI2310
VP3230
Reg +2.5V
Reg +1.8V
VIDEO O/P
UPD64084
VP3230
AV3 AV4
CX2069
Z86229
AV1 AV2
CONNECTOR 51
FORMATTER PCB
TUNER
INTERFACE PCB
Vs(=70+10xVva)
Va(=30+20xVvs)
Reg +5V
SW REG VCC
SW REG Vs
SW REG Va
RELAY SW
STBY+5V
SW Reg STBY+5V
PFC
Reg STB+3.5V
STBY+3.3V
RELAY SW
(Secondary)
POWER SUPPLY UNIT
FILTER PCB
S900
SW PCB
(Primary)
AC INLET WITH NOISE FILTER

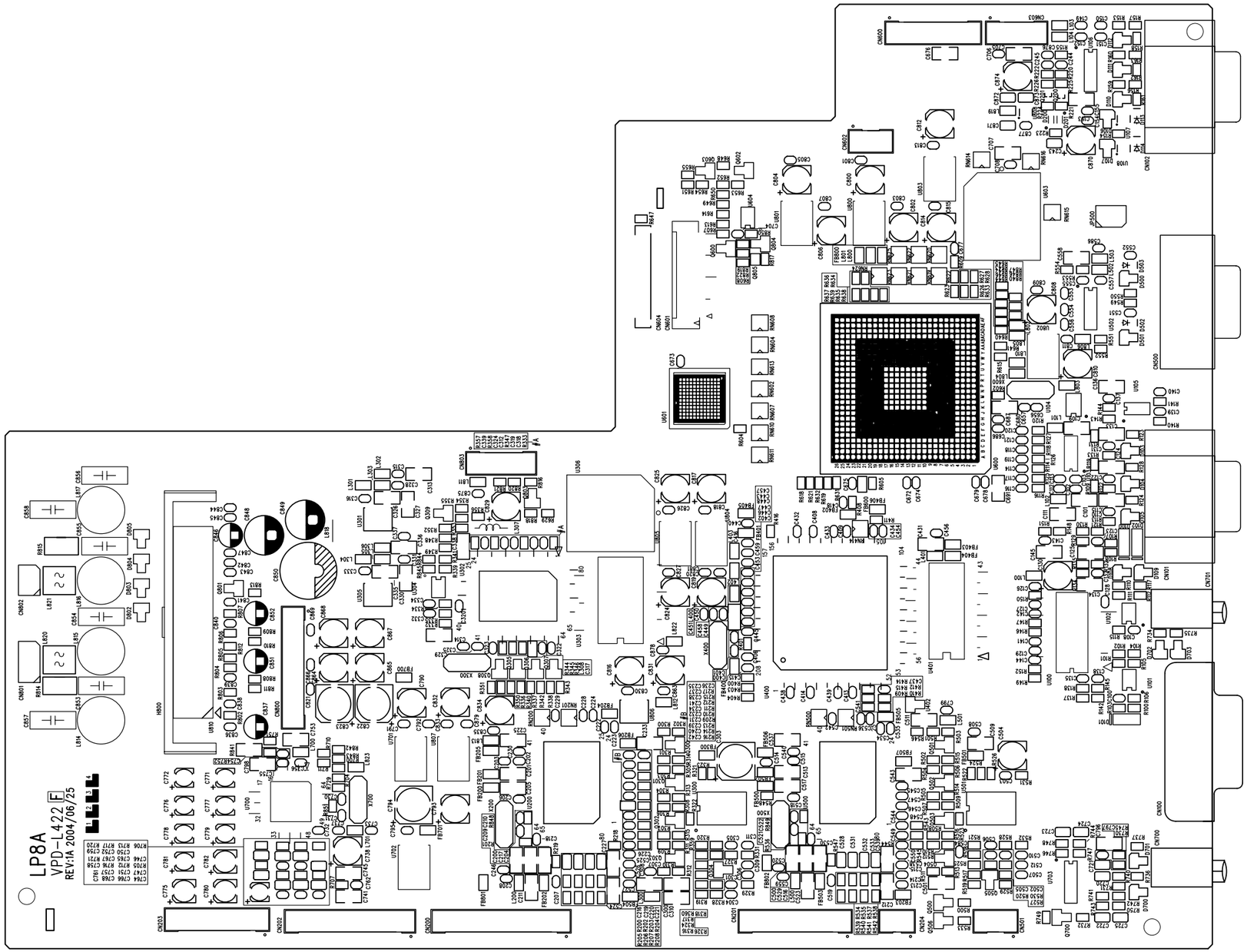

CN62
L001
L002
C094
C004
C093
R002
Z001
G
H
D004
RL002
C010
D011
D010
C
R003
R005
R004
D005
D006
D007
D008
R018
PC001
C019
R019
R013
R014
R012
R015
R017
R016
D022
D023
D024
D020
D021
G
F
D009
RL001
C008
D003
D001
L003
L005
C015
D017
A
B
C006
C007
C011
R020
R021
D016
R034
R028
D015
R035
R030
Q003
Q004
R033
C012
C013
C016
R062
R047
R063
R048
R064
R049
R065
R050
R024
R074
R025
R075
R026
R076
R027
R077
R031
R032
E
C040
R043
R044
Q005
Q006
R040
R022
R023
R041
R042
R061
R051
R052
R053
R063
R054
J
R055
R064
C024
C023
D018
PTC001
C025
Q010
R067
R066
R070
R068
PC004
C026
D
IC001
1
2
3
4
5
6
7
8
9
※ : OPTIONAL

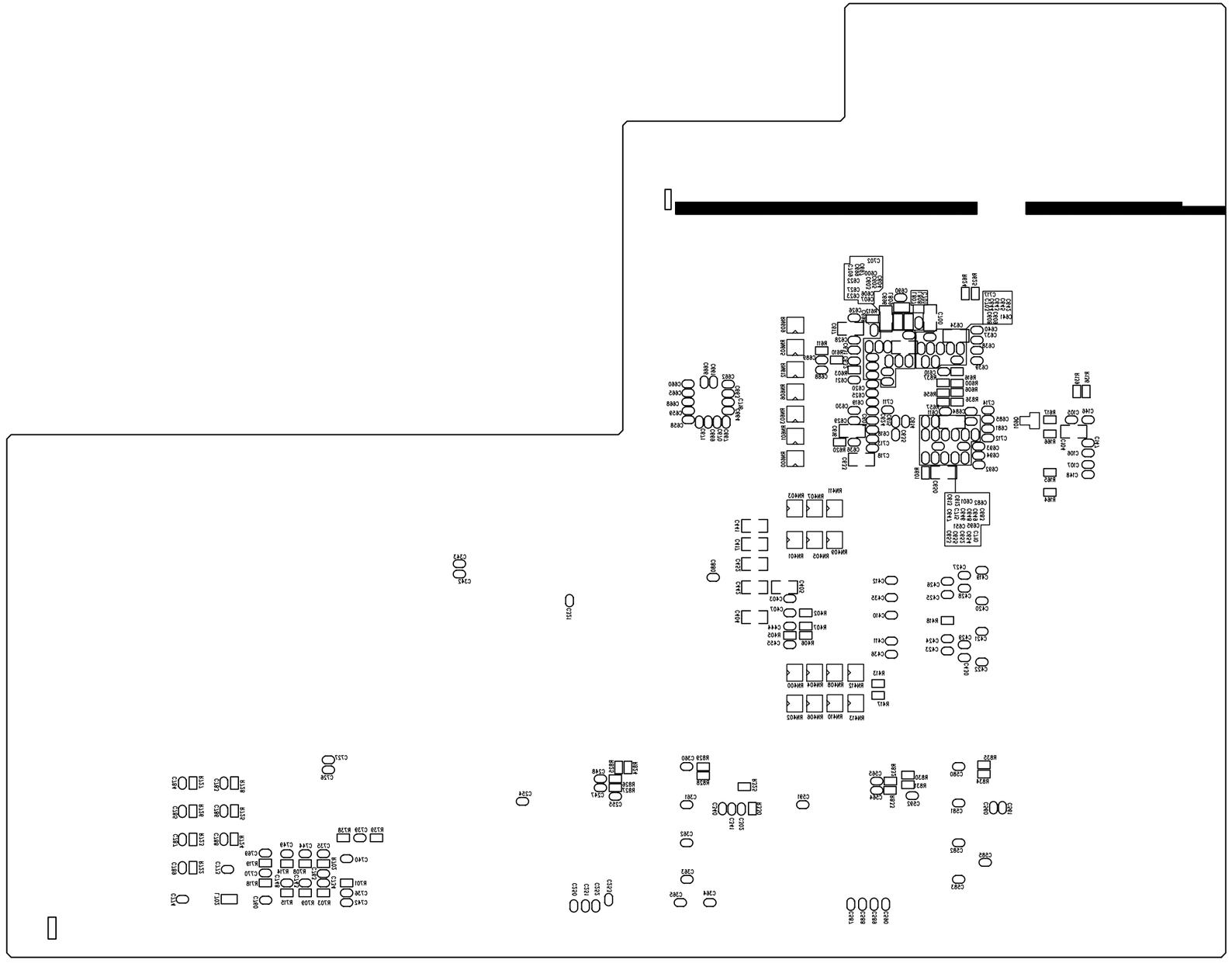

T101
C152
D151
D145
R118
R119
R120
R121
Q101
R112
Q110
C108
D109
D108
PC101
R111
D110
IC101
C110
C151
D178
R153
R154
C153
PC153
R151
R164
PC101
R167
R165
R169
R163
C163
IC152
R168
C152
STBY 5V
CN53
STBY 5V GND
CN53
R183
PC001
Q178
R184
C172
IC170
S1
S2
S3
S4
S5
S6
G
H
F
R170
PC003
R175
Q170
R171
PC302
PC351
R176
Q171
R172
PC202
R177
Q172
R173
PC502
PC551
R178
Q173
Q174
Q175
J91
PC553
PC353
C173
PC004
Q274
R274
C170
IC170
Q177
R182
Power go
CN53
R181
R180
Power Off
CN53
Q176
GND
CN53
G105
PC003
R110
D106
R109
D114
C113
R107
Q108
D113
R104
PC153
D112
R103
C104
R102
D103
D104
R108
Q104
R106
C106
R105
R101
D111
J

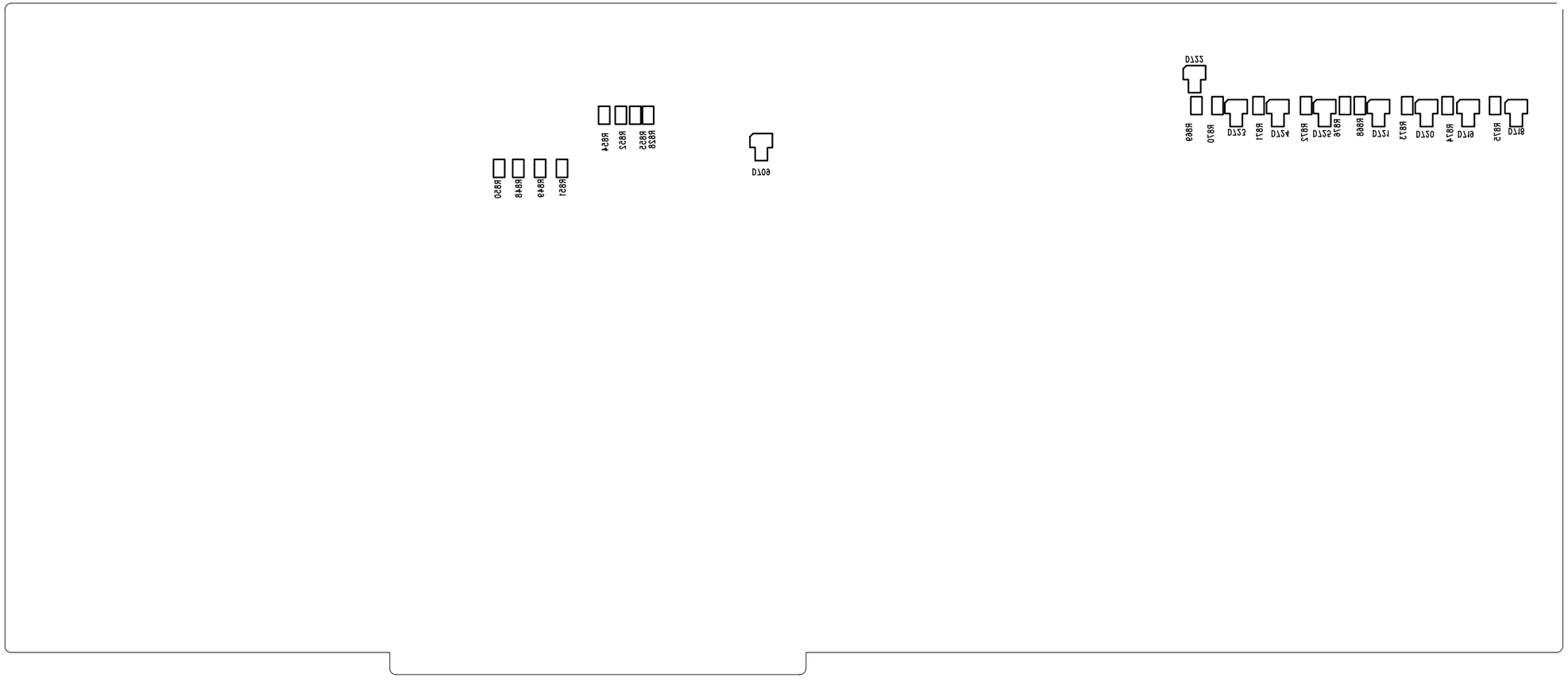

T201
D261
30V
30V GND
12V
12V GND
10V
10V GND
5V(VCC)
5V(VCC)GND
6V
6V GND
IC201
IC261
IC271
IC251
IC291
L261
L291
PC201
PC202
Q200
Q201
Q220
Q255
Q265
Q285
D271
D251
D210
D257
D288
D278
D298
D235
D236
PTC235
C201
C220
C251
C252
C253
C254
C262
C263
C272
C273
C275
C276
C292
C240
C247
C248
R201
R202
R203
R204
R205
R209
R220
R231
R232
R233
R234
R235
R240
R245
R246
R247
R248
R251
R254
R255
R256
R259
R260
R261
R263
R264
R265
R266
R269
R270
R271
R275
R276
R279
R280
R281
R283
R285
R289
R290
R291
R293
R295
R296
R299
VR251
VR270
VR280
VR291
CN805
CN807
CN63
CNPPS

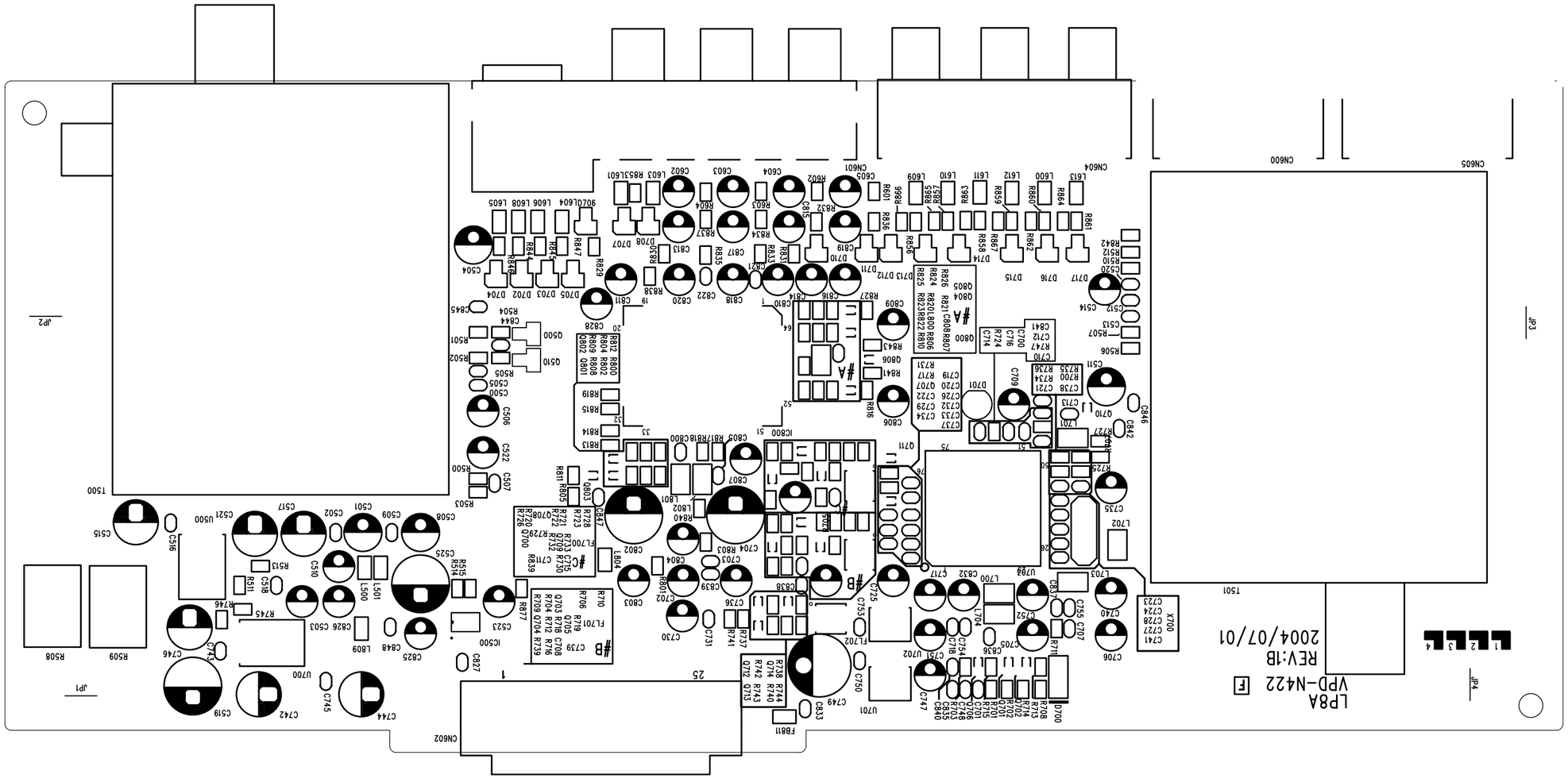

A
B
T301
C351
D351
C352
C320
R320
Q320
R331
R332
R333
R334
R301
R302
R303
R304
Q301
R335
D310
Q300
PC302
R305
PC301
R309
IC301
R391
R392
R393
R361
R362
R363
R366
Q361
D361
R365
PC351
Q362
R378
R377
R376
R375
Q375
S1
D359
R359
PC353
R343
R344
R341
R342
PC301
D355
R346
R345
R340
C340
IC351
C382
R382
R350
R351
VR351
R355
C353
D381
R381
65V
CN807
PIN3
65V_GND
PIN1

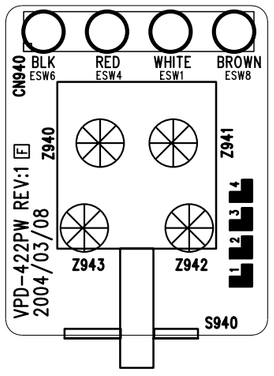

A
B
T501
C501
C551
D551
R538
R539
R521
C521
Q520
R520
R524
R525
R523
R527
D521
D522
Q522
C522
R522
R531
R532
R533
R534
R501
R502
R503
R504
C553
C552
J591
R592
R593
R562
R561
R563
R554
R565
R556
R567
R561
R568
Q561
PC551
Q562
R578
R577
R576
R575
Q573
S1
D557
D558
D559
R569
PC553
R542
R541
R543
R544
R547
PC501
R545
R546
C540
R540
IC551
C542
R552
R550
R551
VR551
R555
D548
175V
175V GND
1 CN807
2 CN807
1 CN806
2 CN806
3 CN806
1 PIN5
5 CN806
6 CN806
7 CN806
8 CN806
4 CN807
5 CN807
Q501
C510
PC501
R514
R512
R511
D506
R509
R517
D504
R510
R505
Q502
C509
R508
PC502
Q500
R535
D510


LP8A
VPD-L422 E
REV:IA 2004/06/25

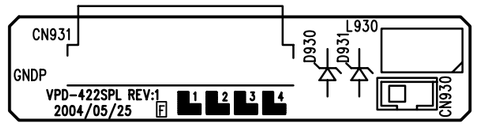



R814
R815
R816
R817
R818
R819
R820
R821
R822
R823
R824
R825
R826
R827
R828
R829
R830

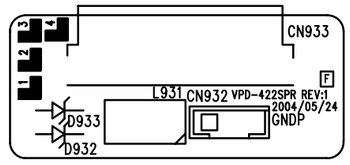

LP8A
VPD-N422 F
2004/07/01
REV:1B



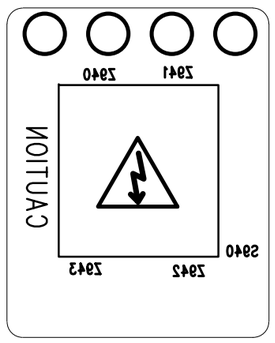

| SILKSCREEN TOP-SIDE | |
|---|---|
| MODEL: | LP8A VPD-422PW REV:1 |
| Date: | 2004/03/08 |
| | COMPAL CO., LTD SCALE 1:1 |



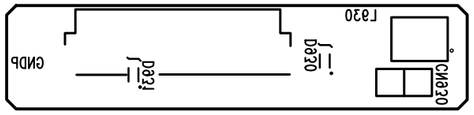

| SLK-TOP | |
|---|---|
| MODEL: | VPD-422SPL REV:1 |
| Date: | 2004/05/25 |
| | COMPAL CO., LTD SCALE 1:1 |



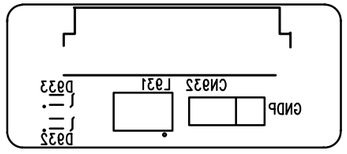

| SLK-TOP | |
|---|---|
| MODEL: | VPD-422SPR REV:1 |
| Date: | 2004/05/24 |
| | COMPAL CO., LTD SCALE 1:1 |



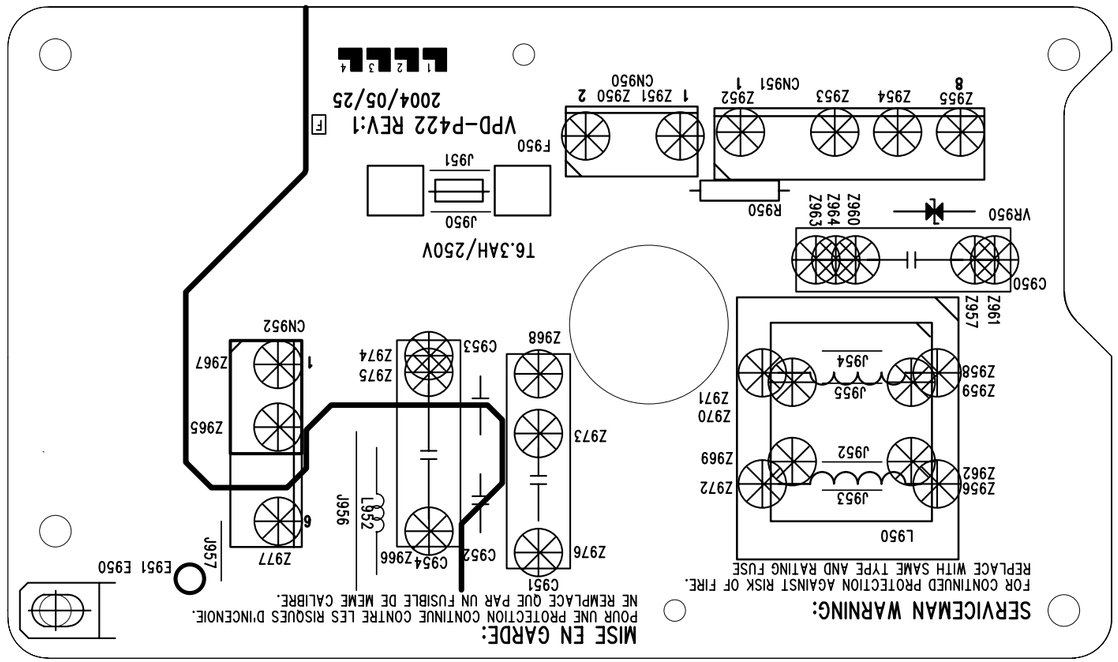

| SILKSCREEN BOTM SIDE | |
|---|---|
| MODEL: | LP8A VPD-422PW REV:1 |
| Date: | 2004/03/08 |
| | COMPAL CO., LTD SCALE 1:1 |

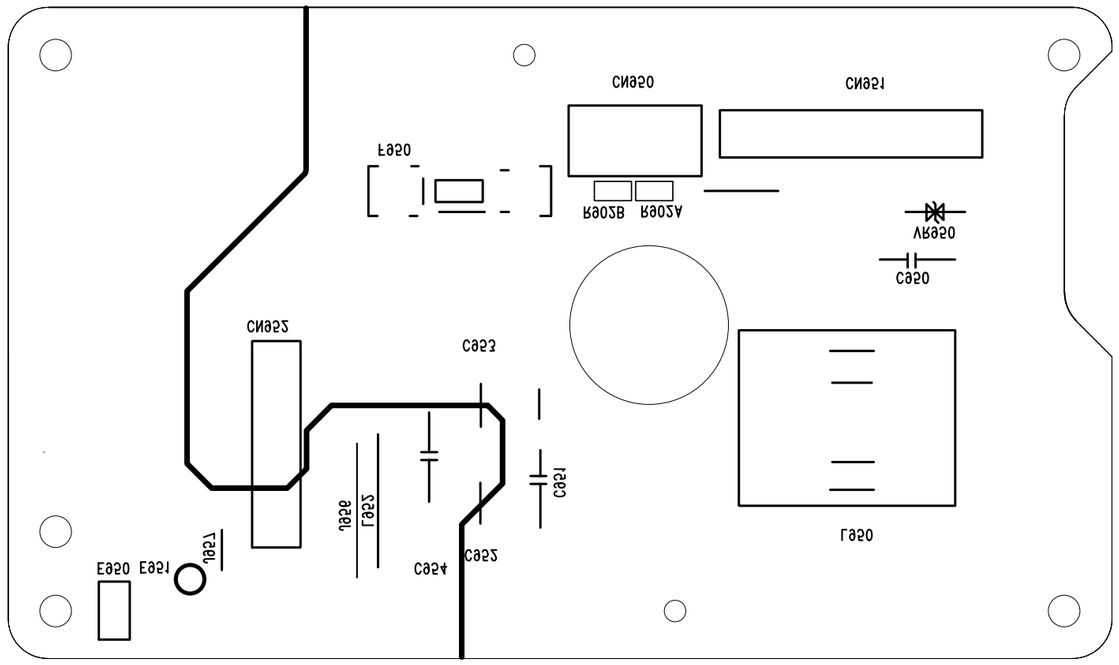


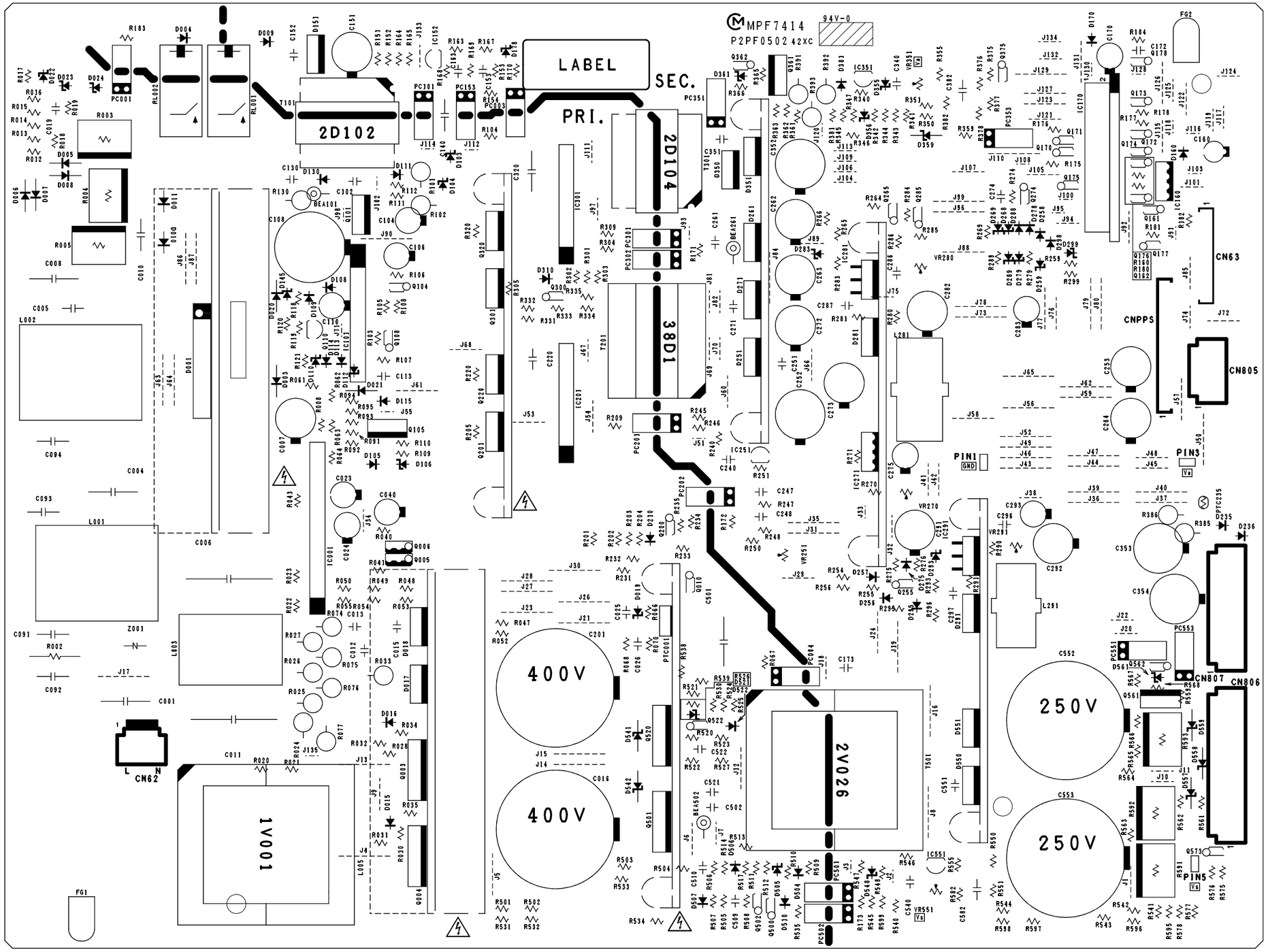

| SLK-BOT | |
|---|---|
| MODEL: | VPD-422SPL REV:1 |
| Date: | 2004/05/25 |
| | COMPAL CO., LTD SCALE 1:1 |

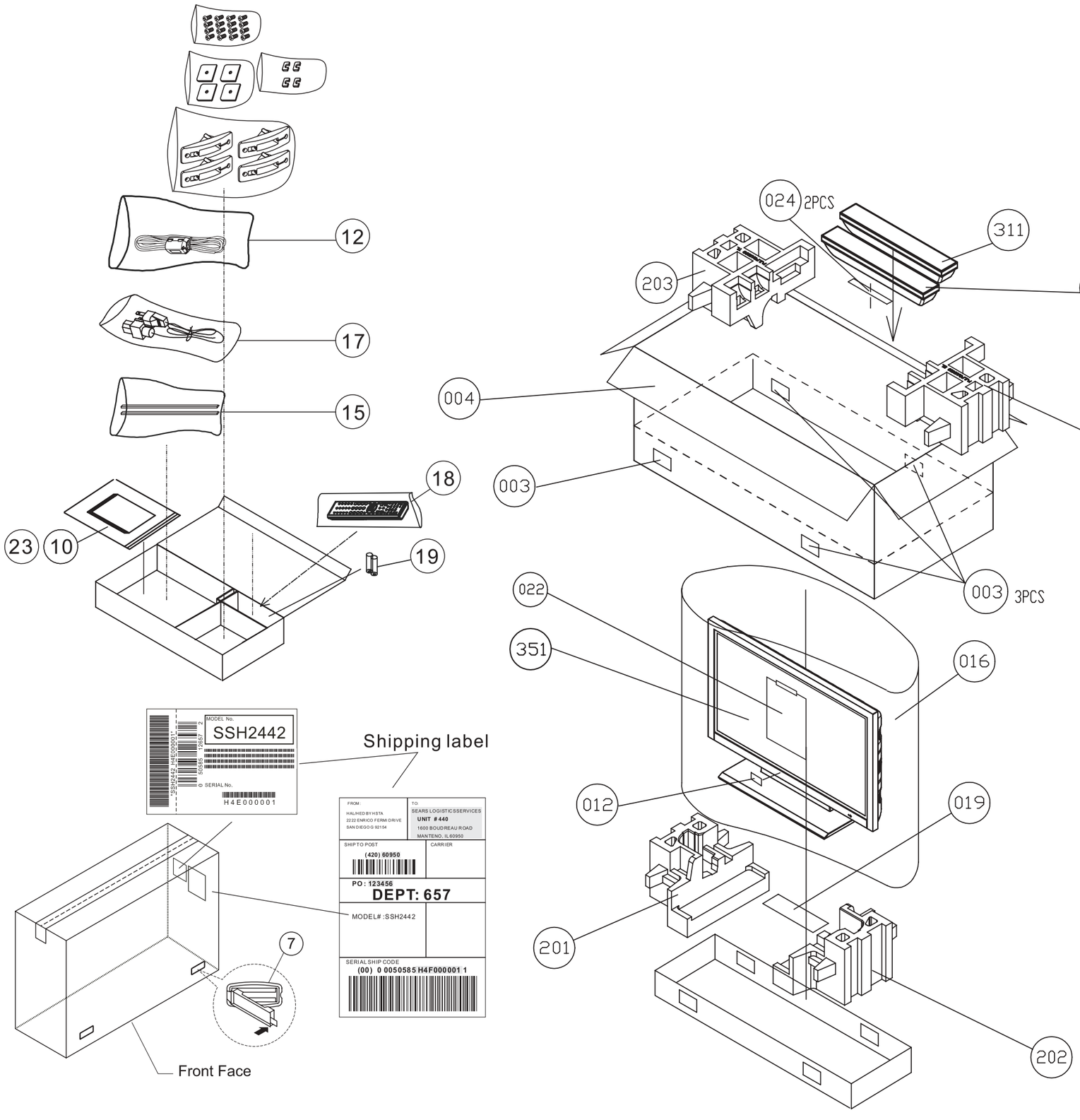


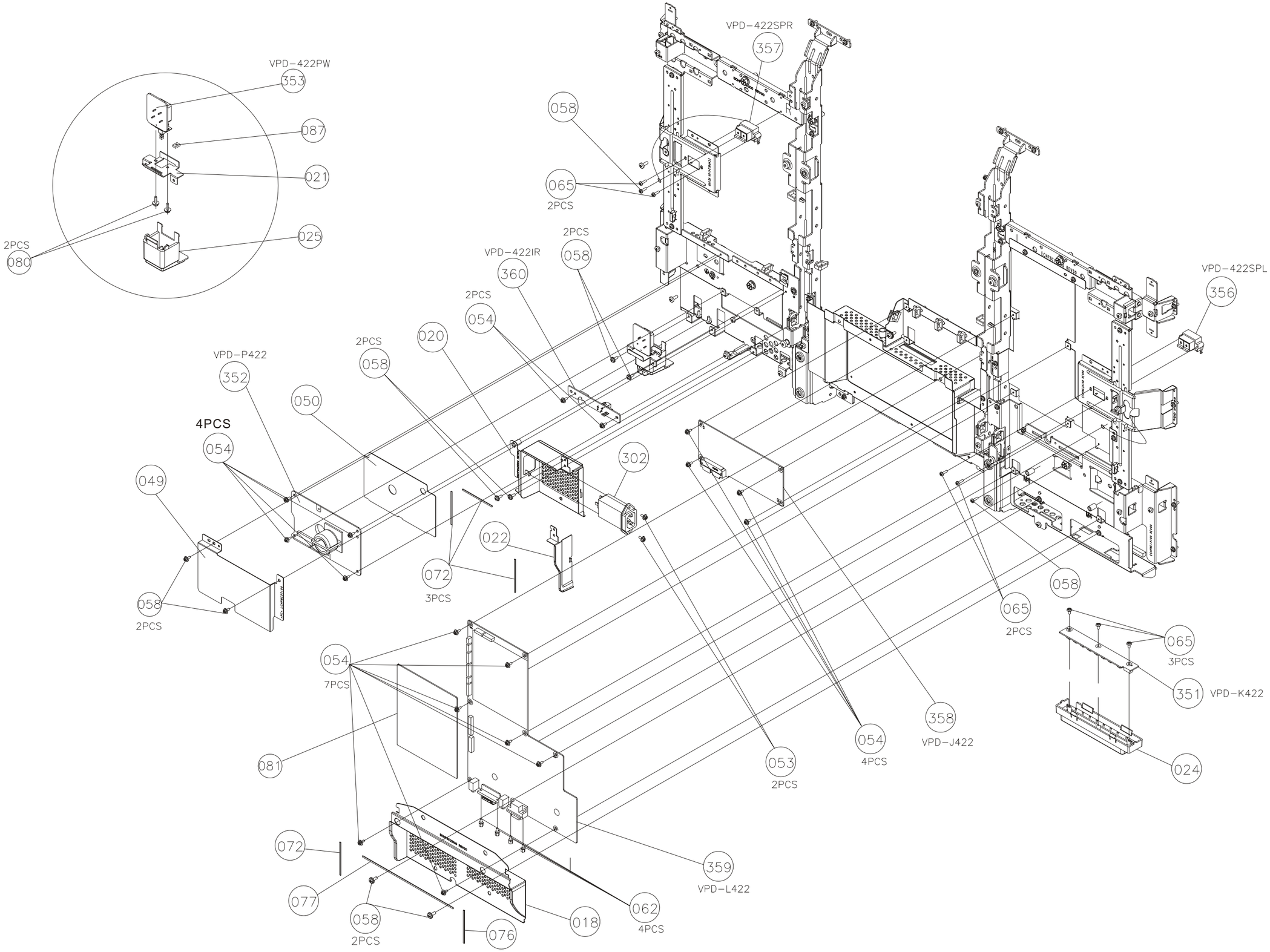

| SLK-BOT | |
|---|---|
| MODEL: | VPD-422SPR REV:1 |
| Date: | 2004/05/24 |
| | COMPAL CO., LTD SCALE 1:1 |

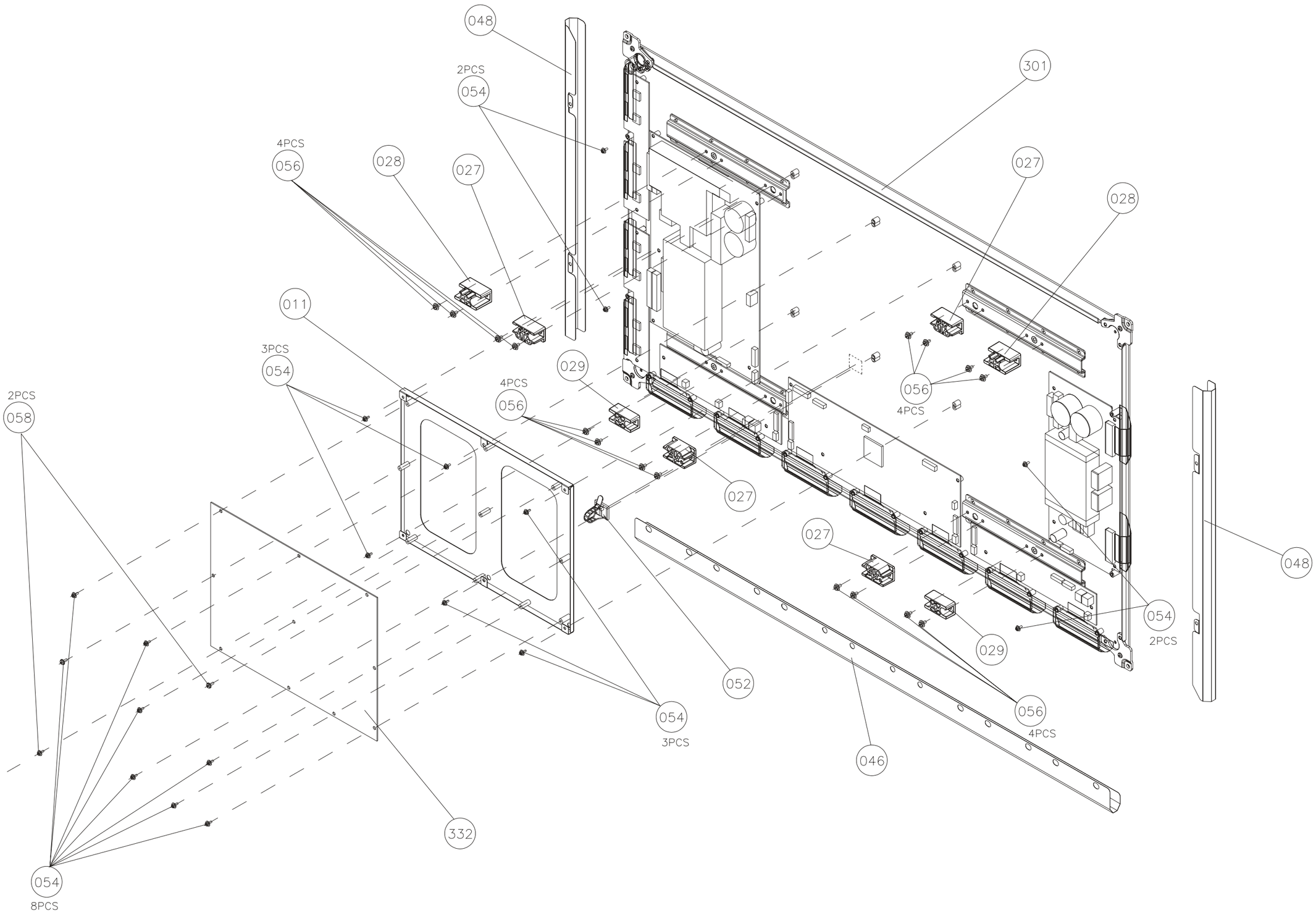

SERVICEMAN WARNING:
FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.
REPLACE WITH SAME TYPE AND RATING FUSE
MISE EN GARDE:
POUR UNE PROTECTION CONTINUE CONTRE LES RISQUES D'INCENDIE.
NE REMPLACE QUE PAR UN FUSIBLE DE MEME CALIBRE.
VPD-P422 REV:1
2004/05/25
T6.3AH/250V
F950
J951
J950
R950
VR950
C950
L950
J954
J955
J952
J953
J956
J957
E951 E950
C951
C952
C953
C954
Z951
Z952
Z953
Z954
Z955
Z956
Z957
Z958
Z959
Z960
Z961
Z962
Z963
Z964
Z965
Z966
Z967
Z968
Z969
Z970
Z971
Z972
Z973
Z974
Z975
Z976
Z977
CN950
CN951
CN952


CN850
CN851
F850
R803B
R803A
VR850
C850
CN852
C853
C852
C854
C855
R856
R857
T851
E850
E851
L850

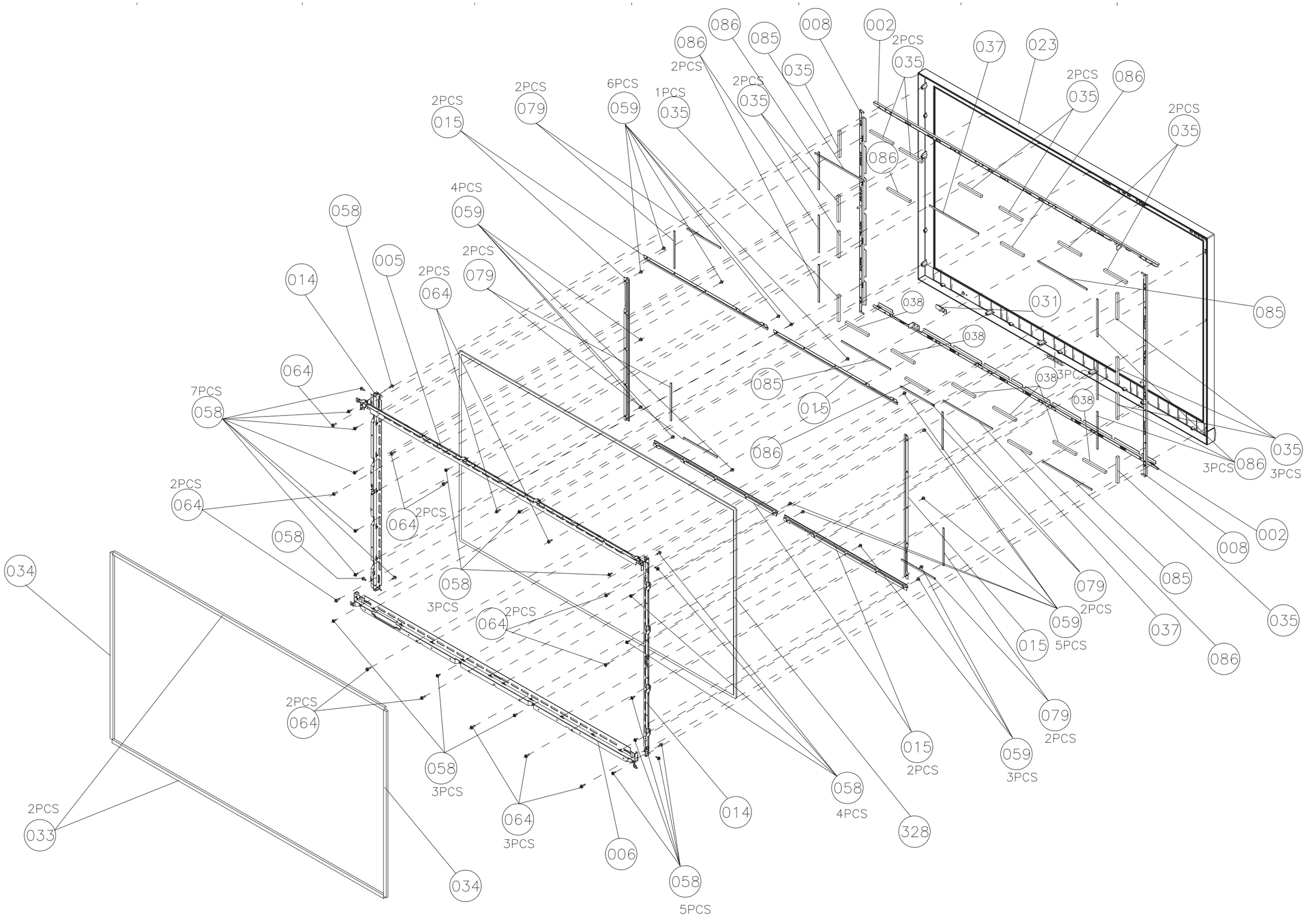

MPF7414
94V-0
P2PF05024 2XC
LABEL
SEC.
PRI.
2D102
2D104
3BD1
2V026
1V001
400V
400V
250V
250V
CN62
CN63
CNPPS
CN805
CN807
CN806
PIN1
GND
PIN3
PIN5
FG1
FG2


12
17
15
18
23
10
19
024
2PCS
311
203
312
004
204
003
003
3PCS
022
351
016
012
019
201
202
7
Front Face
Shipping label
MODEL No.
SSH2442
SERIAL No.
H4E000001
FROM:
HALMED BY HSTA
2222 ENRICO FERMI DRIVE
SAN DIEGO G 92154
TO:
SEARS LOGISTICSSERVICES
UNIT #440
1600 BOUDREAU ROAD
MANTENO, IL 60950
SHIP TO POST
(420) 60950
CARRIER
PO: 123456
DEPT: 657
MODEL#:SSH2442
SERIAL SHIP CODE
(00) 0 0050585 H4F000001 1

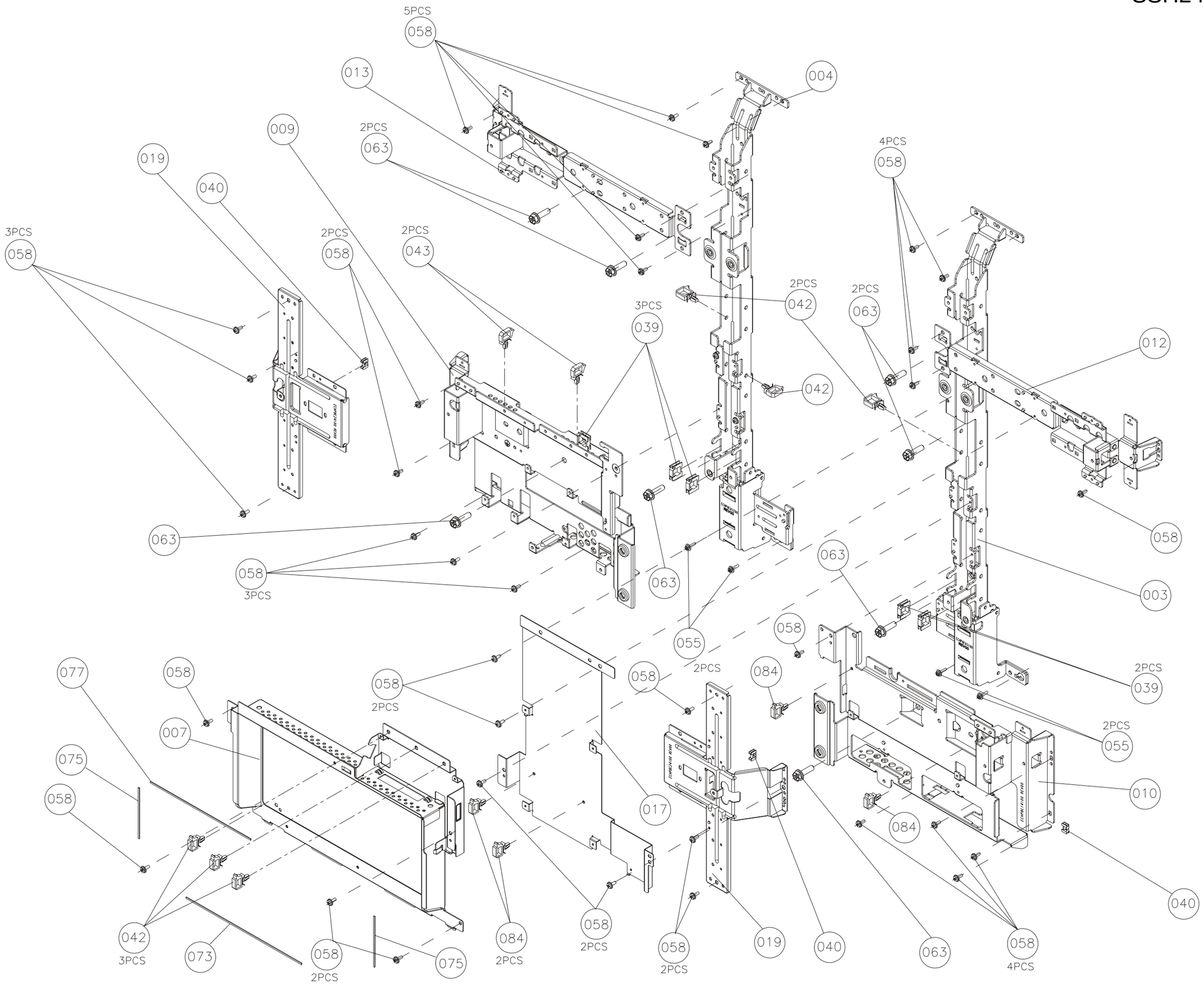

VPD-422PW
353
087
021
025
2PCS
080
VPD-422SPR
357
058
065
2PCS
2PCS
058
VPD-422IR
360
2PCS
054
020
2PCS
058
VPD-P422
352
050
4PCS
054
049
302
022
072
3PCS
058
2PCS
VPD-422SPL
356
058
065
2PCS
065
3PCS
351
VPD-K422
024
358
VPD-J422
054
4PCS
053
2PCS
054
7PCS
081
072
077
058
2PCS
076
018
062
4PCS
359
VPD-L422


048
2PCS
054
301
4PCS
056
028
027
027
028
011
3PCS
054
029
4PCS
056
2PCS
058
056
4PCS
027
027
048
054
2PCS
029
052
056
4PCS
054
3PCS
046
332
054
8PCS

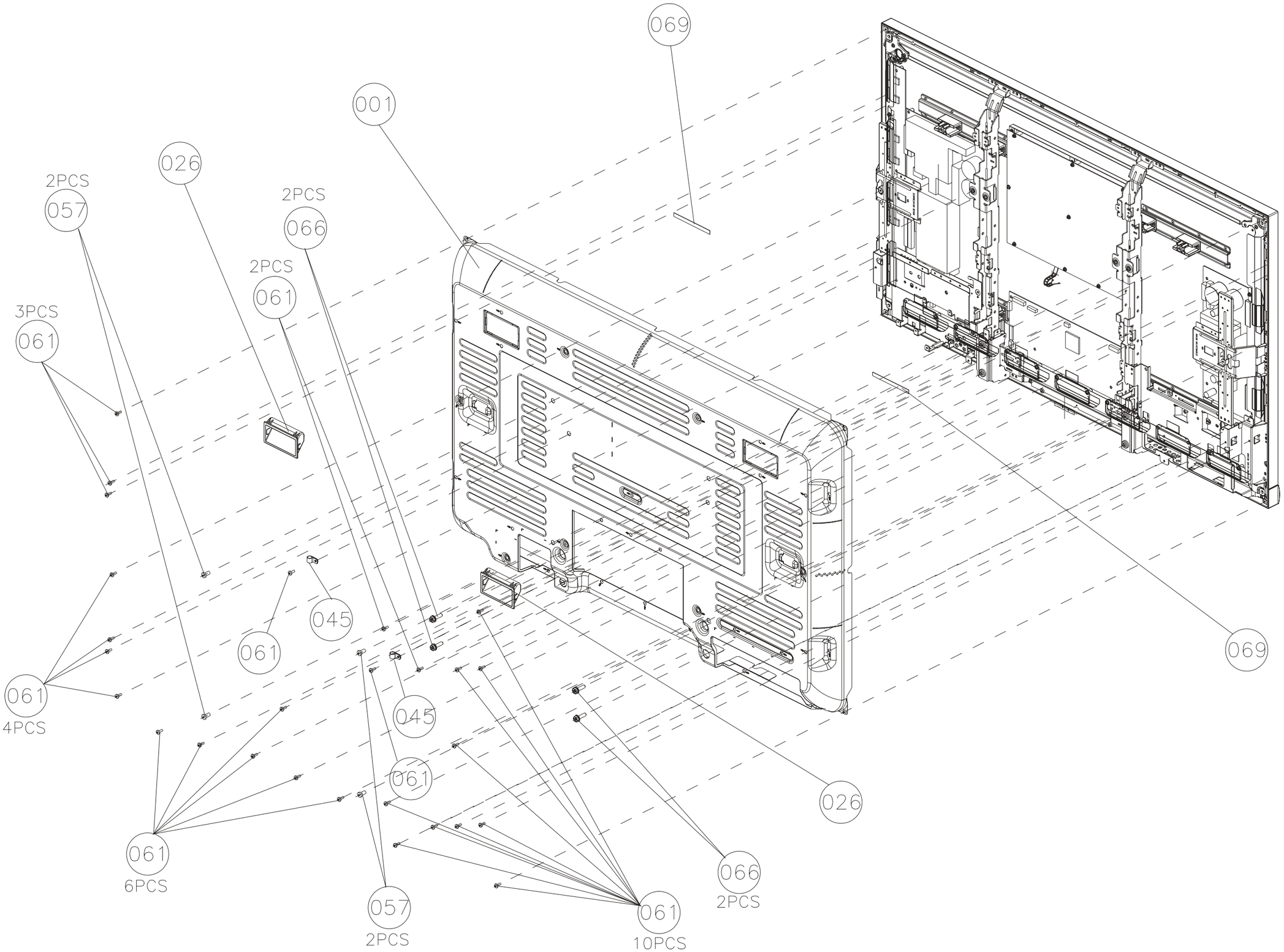
SSH2442

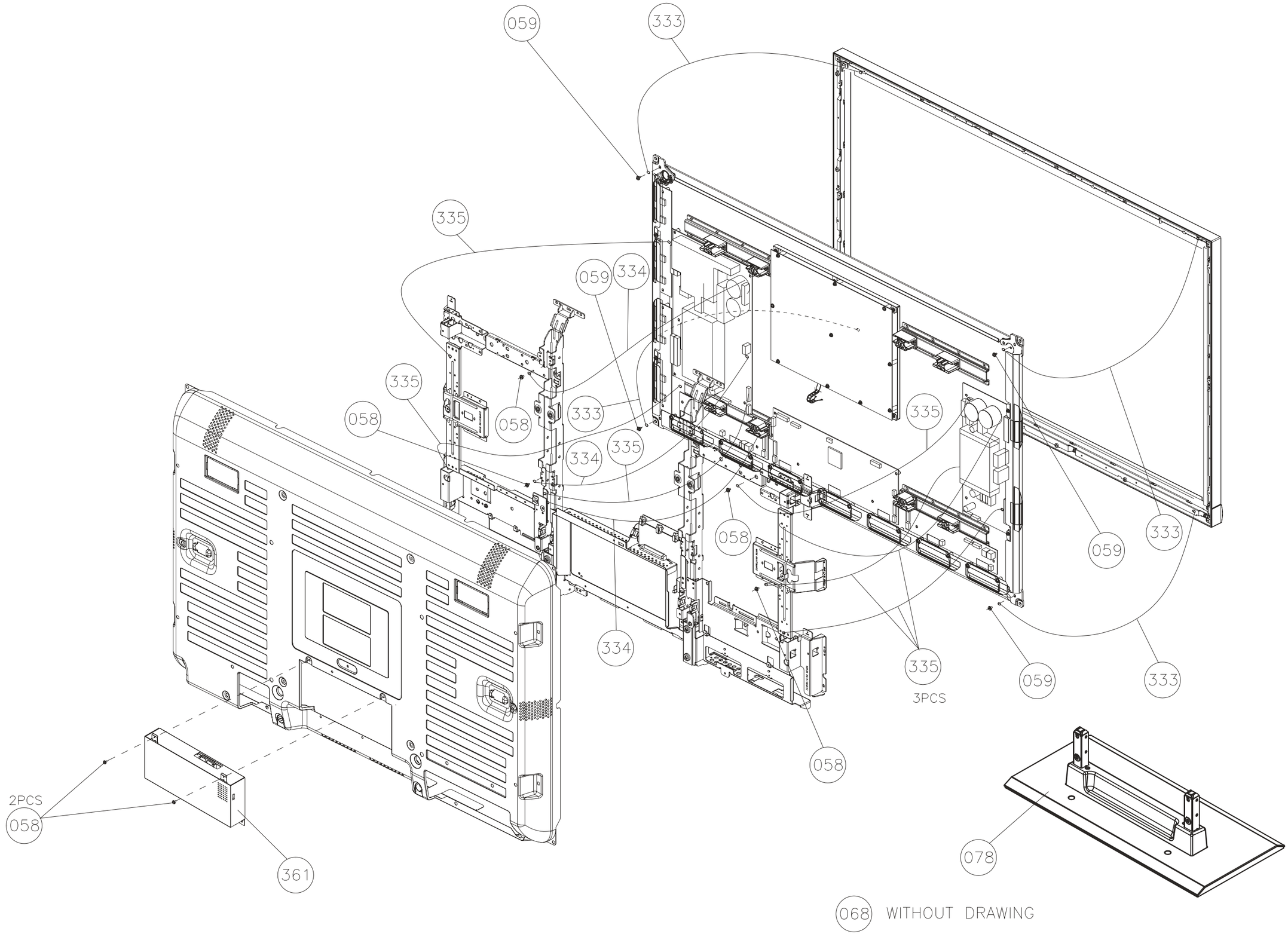

086
086
085
008
002
2PCS
035
2PCS
035
037
023
2PCS
035
086
2PCS
035
6PCS
059
1PCS
035
2PCS
079
2PCS
015
086
4PCS
059
058
2PCS
079
005
2PCS
064
014
038
031
085
038
064
085
3PCS
038
7PCS
058
015
038
086
035
3PCS
086
3PCS
2PCS
064
064
2PCS
058
002
008
085
079
2PCS
058
3PCS
064
2PCS
059
5PCS
015
037
035
086
034
2PCS
064
079
2PCS
015
2PCS
059
3PCS
058
3PCS
014
058
4PCS
064
3PCS
328
2PCS
033
006
034
058
5PCS

SSH2442


5PCS
058
013
004
009
2PCS
063
019
040
3PCS
058
2PCS
058
2PCS
043
2PCS
042
3PCS
039
042
4PCS
058
2PCS
063
012
063
3PCS
058
063
058
2PCS
055
058
003
077
058
007
075
058
042
3PCS
073
058
2PCS
075
058
2PCS
084
2PCS
058
2PCS
017
058
084
2PCS
039
2PCS
055
010
084
040
019
040
063
058
4PCS

SSH2442


069
001
026
2PCS
057
2PCS
066
2PCS
061
3PCS
061
061
045
061
4PCS
045
061
026
061
6PCS
066
2PCS
057
2PCS
061
10PCS
069


059
333
335
059
334
335
058
058
333
335
334
335
058
334
335
3PCS
059
333
058
2PCS
058
361
078
068 WITHOUT DRAWING

# 13 SPARE PARTS LIST

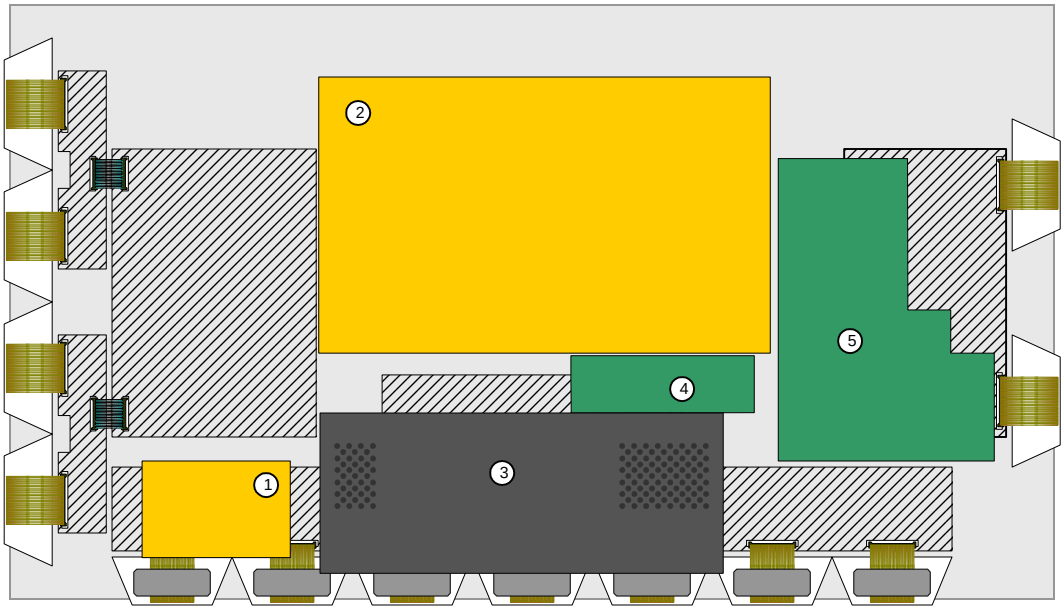
| | | | Item/Model name | SSH2442 | | DWG NO. | Location |
|---|---|---|---|---|---|---|---|
| | | | Compal model | LP8SA | | | |
| | | | Compal P/N | WLP8SAG0001 | | | |
| Line | Desc | Spec | Item_no | Usage | Hitachi Parts number | | |
| 1 | PDP MODU | PDP42V60000 42" LG | ACPVG420100 | 1 | TP01031 | | 301 |
| 2 | PDP FILT (*from Japan) | 42 MITSUI KS08361K | DC554200100 | 1 | TP01032 | | 336 |
| 3 | PCBA AC-FILTER/B | VPD-P422 WLP8AG | 453ABE30001 | 1 | TS05571 | A | 352 |
| 4 | PCBA KEY/B | VPD-K422 WLP8AG | 454ABE30001 | 1 | TS05572 | | 351 |
| 5 | PCBA IR/B | VPD-422IR WLP8AG | 454ABF30001 | 1 | TS05573 | | 360 |
| 6 | PCBA TUNER/B | PC Spec: VTV-N7914 SLV832 | 455AB730001 | 1 | TP01033 | B | 152 |
| 7 | PCBA AC-SW/B | VPD-422PW WLP8AG | 455ABA88001 | 1 | TS05574 | | 353 |
| 8 | PCBA SP-SPL/B | VPD-422SPL WLP8AG | 455ABB30001 | 1 | TS05575 | | 356 |
| 9 | PCBA SP-SPR/B | VPD-422SPR WLP8AG | 455ABC30001 | 1 | TS05576 | | 357 |
| 10 | PCBA INTERFACE/B | VPD-J422 WLP8AG | 455ABE30001 | 1 | TS05577 | | 358 |
| 11 | FIRMWARE FORMATTER/B | VPD-L422 WLP8SA J88-SEARS | 461ABE88001 | 1 | TS05578 | C | 359 |
| 12 | SPEAKER | 12W 60HM 42" R | CG1012V0H0 | 1 | TP01034 | | 311 |
| 13 | SPEAKER | 12W 60HM 42" L | CG1012V1H0 | 1 | TP01035 | | 312 |
| 14 | SPEAKER LEAD WITH CORE | 2P P1.25 430mm W/CLAMP CORE | NBC02100200 | 1 | TP01062 | | 307 |
| 15 | SPEAKER GRILL | LP8A11 MCG28+MSV50 ABS 94HB | FALP8A11000 | 2 | TP01063 | | |
| 16 | BEZEL WITH GASKET | | 39100688003 | 1 | TP01064 | | |
| 17 | BACK COVER ASSY | ALL LABEL | 39010688001 | 1 | TP01065 | | |
| 18 | TABLE STAND ACCESSORY | MCG28+MSV32/MBK22 ABS94HB | FALP8A15300 | 1 | TP01036 | | |
| 19 | LINE FILT | HP8C SUP-C14608F 8 | CL900007900 | 1 | TP01037 | | 302 |
| 20 | H-CON SET | HP8C FILTER PPU1-POWER CN62 | DC020166010 | 1 | TS05581 | | 316 |
| 21 | H-CON SET | HP8C FILTER PSW-MSW ESW | DC020166110 | 1 | TS05582 | | 317 |
| 22 | H-CON SET | HP8C FILTER PPU2-EMI FILTER | DC020166210 | 1 | TS05583 | | 318 |
| 23 | H-CON SET | HP8C PANEL P1-POWE | DC020169010 | 1 | TP01038 | | 319 |
| 24 | H-CON SET | HP8C PANEL P6-POWER CN805 | DC020169110 | 1 | TS05584 | | 320 |
| 25 | H-CON SET | HP8C PANEL P5-POWER CN806 R1 | DC020169210 | 1 | TP01039 | | 321 |
| 27 | H-CON SET | LP8A INTERFACE CN982-CN800 | DC020171300 | 1 | TS05585 | | 303 |
| 28 | H-CON SET | LP8A INTERFACE CN983-CN63 | DC020171400 | 1 | TS05587 | | 304 |
| 29 | H-CON SET | LP8A INTERFACE CN989-CN203 | DC020171500 | 1 | TS05588 | | 305 |
| 30 | H-CON SET | LP8A INTERFACE CN984-CN803 | DC020171600 | 1 | TS05589 | D | 306 |
| 31 | H-CON SET | LP8A INTERFACE CN988-CN202 | DC020171700 | 1 | TS05591 | | 307 |
| 32 | H-CON SET | LP8A INTERFACE CN981-CNPPS | DC020171800 | 1 | TS05592 | | 308 |
| 33 | H-CON SET | LP8A INTERFACE CN987-CN204 | DC020171900 | 1 | TS05593 | | 309 |
| 34 | H-CON SET | LP8A INTERFACE CN985-CN200 | DC020172000 | 1 | TS05594 | | 310 |
| 35 | H-CON SET | LP8A INTERFACE CN986-CN201 | DC020172100 | 1 | TS05595 | | 311 |
| 36 | H-CON SET | LP8A IR CN603-CN900 | DC020172200 | 1 | TS05596 | | 312 |
| 37 | H-CON SET | LP8A KEY CN911-CN600 | DC020172300 | 1 | TS05597 | | 313 |
| 38 | H-CON SET | LP8A SP(2P) CN802-SP R | DC020172400 | 1 | TS05598 | | 314 |
| 39 | H-CON SET | LP8A SP(3P) CN801-SP L | DC020172500 | 1 | TS05599 | | 315 |
| 40 | H-CON SET | LP8A LVPS CN604-P31 | DC020172600 | 1 | TS05601 | | 322 |
| 41 | CORE | KC K5B FS 31X5X12- | DC150V00700 | 1 | TP01041 | | |
| 42 | CLIP CORE | TDK ZCAT1518-0730 2169511 | DC152000400 | 1 | TS05602 | | |
| 43 | CLIP CORE | TDK ZCAT3035-1330 | DC152000500 | 1 | TP01042 | | |
| 44 | CLIP CORE | TDK ZCAT2032-0930 | DC152000600 | 1 | TP01043 | | |
| 45 | CLIP CORE | TDK ZCAT2032-0930-BK 2169514 | DC152000610 | 1 | TS05603 | E | 327 |
| 46 | CABLE ASSY | DV87 20276 1.8M BLK DSUB | DC1900401D0 | 1 | | | 308 |
| 47 | CABLE ASSY | DV87 AUDIO 1.8M BLK GRN-BLU | DC1900402D0 | 1 | | | 309 |
| 48 | CABLE ASSY | DV87 2725 1.8M BLK 4PIN S-CABL | DC1900403D0 | 1 | | | 306 |
| 49 | CABLE ASSY | DV87 RCA 1.8M BLK-YEL | DC1900404D0 | 1 | | F | 305 |
| 50 | CABLE ASSY | DV87 RCA 1.8M BLK G/BLU/R 3P | DC1900405D0 | 1 | | | 303 |
| 51 | CABLE ASSY | DV87 RCA 1.8M BLK R/W 2P | DC1900406D0 | 1 | | | 304 |
| 52 | POWER PWB MTL | HP8C15 SECC T=0.8 | ECHP8C15100 | 1 | TP01044 | | 011 |
| 53 | FITLER SUPPORT MTL | HP8C21 SUS304 T=0. | ECHP8C21100 | 6 | TP01045 | | 015 |
| 54 | AC MTL (A) | HP8C36 SECC T=0.8 | ECHP8C36100 | 1 | TP01046 | | 020 |
| 55 | AC MTL (B) | HP8C47 SECC T=0.8 | ECHP8C47100 | 1 | TS05611 | | 022 |
| 56 | PANEL SUPPORT (A) | HP8C43 | FAHP8C43100 | 4 | TP01047 | | 027 |
| 57 | PANEL SUPPORT (B) | HP8C44 | FAHP8C44100 | 2 | TP01048 | G | 028 |
| 58 | PANEL SUPPORT (C) | HP8C45 | FAHP8C45100 | 2 | TP01049 | | 029 |
| 59 | RC LENS | LP8A42 PMMA | FBLP8A42100 | 1 | TS05613 | | 031 |
| 61 | HANDGRIP | FOR CARTON R1 | FCHV8280010 | 4 | TP01051 | | 003 |
| 62 | AIR FILTER (T/B) | HP8C3A PU FOAM 10X | FHHP8C3A100 | 1 | TS05621 | | 033 |
| 63 | AIR FILTER (L/R) | HP8C3A PU FOAM 10X | FHHP8C3A200 | 1 | TS05622 | | 034 |
| 64 | EPP FOAM(B/L) | LP8A19 | FJLP8A19100 | 1 | TS05628 | | 201 |

| | | | Item/Model name | SSH2442 | | DWG NO. | Location |
|---|---|---|---|---|---|---|---|
| | | | Compal model | LP8SA | | | |
| | | | Compal P/N | WLP8SAG0001 | | | |
| Line | Desc | Spec | Item_no | Usage | Hitachi Parts number | | |
| 65 | EPP FOAM(B/R) | LP8A1D | FJLP8A1D100 | 1 | TS05629 | | 202 |
| 66 | EPP FOAM(T/L) | LP8A1E | FJLP8A1E100 | 1 | TS05631 | | 203 |
| 67 | EPP FOAM(T/R) | LP8A1F | FJLP8A1F100 | 1 | TS05632 | | 204 |
| 68 | PWR CORD | SP305X1.8MXIS14SVT | GA05000060I | 1 | TS05633 | H | 301 |
| 69 | CARTON | C-LP8S-J88-SERRS | HB4LP8S0000 | 1 | TS05634 | | 004 |
| 70 | USER'S MANUAL | U-LP8S-J88-S F U+F | HD88LP8S000 | 1 | TS05635 | | 005 |
| 71 | QUICK SETUP GUIDE | F-LP8S-J88-S U+F+S | HF6LP8S0000 | 1 | TS05636 | | 023 |
| 72 | EPE BAG | HP8C-K001 42"PDP L | HK3HP8C0000 | 1 | TP01052 | | 016 |
| 73 | EPE SHEET | LP8A-CE L1050XW650MM FOR BASE | HK3LP8A0000 | 1 | TS05645 | | 019 |
| 74 | PANEL PC FILM (B) | HP8C25 L=940 | LCHP8C25100 | 1 | TP01053 | | 046 |
| 75 | PANEL PC FILM (R) | HP8C27 L=530 | LCHP8C27100 | 1 | TP01054 | | 048 |
| 76 | FILTER PWB INS (UP) | HP8C37 PC FILM T=0 | LCHP8C37100 | 1 | TS05646 | | 049 |
| 77 | FILTER PWB INS (LOWE | HP8C38 PC FILM T=0 | LCHP8C38100 | 1 | TS05647 | | 050 |
| 78 | TL CLAMP | HV2847 NL66 | LCHV2847100 | 1 | TP01055 | I | 052 |
| 79 | PCB SUPPORT | CBS-5SN(H=5) | LCLP8A41000 | 4 | TS05648 | | 084 |
| 80 | SWITCH EXPANDING COV | LP8A43 N66 | LCLP8A43100 | 1 | TS05649 | | 087 |
| 81 | WIRE SET | W7.6X90X4.1D(LOCK) | NA100901600 | 1 | TP01056 | | 329 |
| 82 | PWR MODU | MURATA MPF7414 PDP | PK101V00600 | 1 | TP01057 | | 332 |
| 83 | REMO CTRL(W/ LABEL) | | 39010688004 | 1 | TP01066 | | |
| 84 | NET WIRE SET | 4.3DX95X4.3D 144C/.12 TUBE | NA200950000 | 1 | TP01058 | | 335 |
| 85 | NET SET | 4.3DX45X4.3D 144C/.12 TUBE | NA200450000 | 1 | TP01059 | J | 334 |
| 86 | NET WIR SET | 4.3DX15X4.3D 144C/.12 TUBE | NA200150000 | 1 | TP01061 | | 333 |

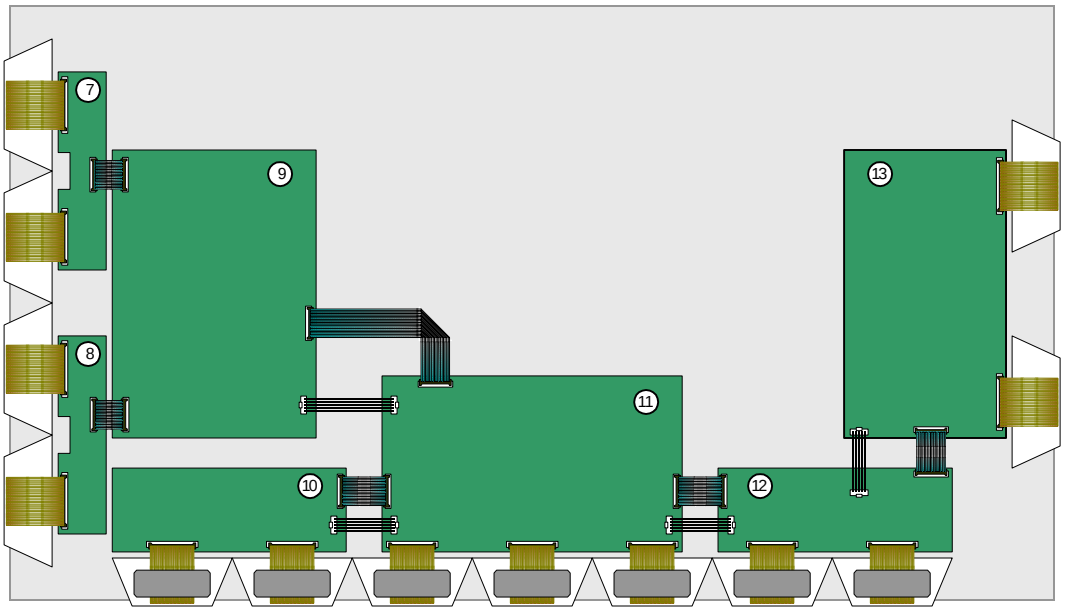
# 14. BOARD LAYOUT

## Circuit Board Layers

### Top Circuit Board Layer




### Bottom Circuit Board Layer




**Top Circuit Board Layer**

1. Filter PWB p/n TS05571
2. Power PWB p/n HA01361
3. Tuner/Input PWB p/n TP01033
4. Interface PWB p/n TS05577
5. Formatter PWB p/n TS05578
6. (not used) p/n

**Bottom Circuit Board Layer**

7. Y-Drive Upper p/n TS05672
8. Y-Drive Lower p/n TS05673
9. Y-SUS PWB p/n TS05679
10. X-Drive Left p/n TS05683
11. Control (LVDS) PWB p/n TS05678
12. X-Drive Right p/n TS05682
13. Z-SUS PWB p/n TS05681



CH 1

HITACHI